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ABSTRACT

In 1995, the American Psychological Association commissioned a task force to develop standards that identify what students in an introductory high school psychology course should learn. The task force's mission was to prepare a document that could be used by policymakers, educators, curriculum developers, parents, and other stakeholders to determine what high school psychology students should know and how they can demonstrate what they know. This publication is constructed to guide curriculum decisions by providing content and performance standards and to guide teachers in designing instruction to meet performance indicators. It provides recommendations for constructing, maintaining, and revising psychology curricula for a quality high school psychology education, and explains the importance of integrating diversity, technology, and active learning into the curriculum. The guide is organized into five parts: (1) "Context and History"; (2) "Standards"; (3) "Implementation Issues"; (4) "References"; and (5) "Resources." Following the standards is a sample unit plan that integrates the standards into a variety of lesson strategies. Appendixes provide resources. (BT)

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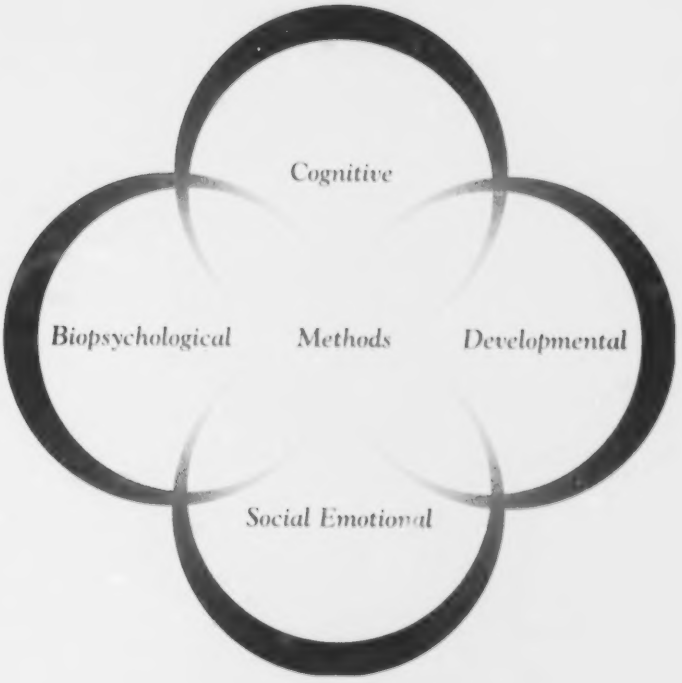

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for

THE TEACHING OF HIGH SCHOOL PSYCHOLOGY

American Psychological Association
August 1999

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American Psychological Association Task Force for the Development of National High School Psychology Standards

NOTICE:

This document represents the work of the Task Force for the Development of National High School Psychology Standards of the American Psychological Association.

The term "standards" is sometimes used to describe mandatory rules, procedures, or other criteria. Also, the failure to comply with some "standards can result in the imposition of penalties or sanctions. The "standards" in this document are not of that sort. This document is intended to encourage excellence in high school psychology programs, but each school must decide how best to structure and conduct its own program.

ACKNOWLEDGMENTS

Although the Task Force for the Development of National High School Psychology Standards was charged with creating this document, the National High School Psychology Standards are the product of many individuals and groups. We cannot name every person who helped us in this project, but we want to acknowledge the Board of Directors, Directorates, and the many Committees and Divisions of the American Psychological Association for their contributions to this effort. Under the leadership of Frank Farley, PhD, and the Board of Directors of APA, this project received initial acceptance. Subsequent leaders have continued this support. Virginia Mathie, PhD, and her committee from the St. Mary's Conference and a work group of the Board of Educational Affairs generously agreed to let us include active learning materials in this document. We hope that these materials will be integrated into the teaching of high school psychology. Finally, we thank two people without whom this document could not have been published: Peter Petrossian, the American Psychological Association Liaison to the Task Force, who facilitated every step of the project, and Jill Reich, PhD, Executive Director of the Education Directorate, under whose aegis this project was developed.

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PART I:
CONTEXT & HISTORY

The Call to Quality:

Introduction to the National Standards for the Teaching of High School Psychology

Do hypnotized people often perform acts that they consider being immoral? Does a permissive style of parenting lead to the best adjustment in children? Is genius closely related to insanity? Is alcohol a stimulant when imbibed in small quantities? Can staring at the back of a person's head make that person turn around? Do we seek opposites in forming friendships? Are horoscopes usually correct?

These questions have at least two things in common. First, many people would answer these questions in the affirmative, but empirical evidence from scientific investigations does not support "yes" answers. Second, psychologists have studied all these questions because they lie within the realm of psychology. Psychology is commonly defined as the scientific study of behavior and mental processes. What makes psychology scientific is the method by which new information is added to the knowledge base. Psychologists use descriptive, correlational, and experimental research methods to describe, explain, predict, and control behavior and mental processes. Behavior includes our observable actions; mental processes include our perceptions, thoughts, feelings, and motives that are not directly observable.

Problems that challenge humankind today include heart disease, AIDS, accidents, eating disorders, addiction, violence, and suicides. These problems arise from behavior, and their successful management requires behavior change. The science of psychology contributes to the solution of society's problems. One contribution is a large body of factual knowledge about behavior and mental processes that can be applied to the challenges we face. The second is a set of powerful methods that science uses to attain such understandings. Finally, psychology places great value on the ability of people to grow and change. Therapeutic interventions and other applications of psychology encourage people to face difficulties and enact changes that will improve their life experiences. Because people can improve their quality of life through better understanding of behavior and mental processes, education in psychology should be a priority for high school students.

More than 800,000 high school students enroll in psychology classes each year. Through the study of scientific psychology, students gain an understanding of behavior as they learn the knowledge and skills necessary to address critical problems of the individual and society. Psychology students learn to distinguish between science and pseudoscience, dispelling misconceptions that mind reading, witchcraft, brainwashing, behavioral programming, and thought control are scientific. Psychology students learn that psychologists do not use mysterious methods to "psych out other people" to obtain advantages through trickery. They learn to recognize limitations of what can be known through intuition and common sense as they learn that psychological science is empirical and analytical.

Whereas common sense relies on intuition, authority, and "what everybody knows" as proof of psychological reality, scientific psychology is built on facts available to public observation. Seeing the human condition in scientific terms is essential to improving it.

Psychology is a science with connections to social and natural sciences. Neither social studies nor science standards have addressed psychology adequately. Because of the departmental structure of American high schools, psychology is most frequently taught in the Social Studies Department or the Science Department (or both). Such departmental designation often influences the curriculum. Courses in the Social Studies Department may emphasize history, personality, and social psychology, whereas courses in the Science Department frequently emphasize biological bases of behavior, sensation and perception, and learning. Variations in high school courses suggest that students' first exposures to psychology are vastly different in content and level of challenge.

The American Psychological Association (APA) commissioned the Task Force for the Development of National High School Psychology Standards in 1995 to develop standards that identify what students in an introductory high school psychology course should learn. Members of the task force were chosen by the APA Education and Science directorates to represent experienced psychology educators at the secondary and university levels as well as other scientists in the profession.

The mission of the task force was to prepare a document that can be used by policymakers, educational leaders, curriculum developers, teachers, parents, and other stakeholders to determine what high school psychology students should know and how they can demonstrate what they know. The document is constructed to guide curriculum decisions by providing content and performance standards and to guide teachers in designing instruction to meet performance indicators.* Key terms used in development of this document include these five:

Domain. A domain is a cluster of related content areas.

Standard Area. Each standard area refers to a major topic or unit representing a subdivision of psychology.

Content Standard. Each content standard describes what the student should comprehend after completing the unit in a high school course.

Performance Standard. Each performance standard states what the student should be able to do in relation to the content standard.

Performance Indicator. Each performance indicator describes opportunities for students and teachers to demonstrate and assess the standard.

This document includes more than content standards, performance standards, and performance indicators. It also provides recommendations for constructing, maintaining, and revising psychology curricula for a quality high school psychology education. The importance of integrating diversity, technology, and active learning into the curriculum is explained and emphasized. A description of how to use the standards is followed by standards designed for 15 units: Introduction and Research Methods; Biological Bases of Behavior; Sensation and Perception; Stress, Coping, and Health; Lifespan Development; Learning; Memory; Thinking and Language; States of Consciousness; Motivation and Emotion; Individual Differences; Personality and Assessment; Psychological Disorders; Treatment of Psychological Disorders; Social Psychology.

When the high school psychology course is a two-semester course, teachers should complete units in all of the Standard Areas. Teaching all Standard Areas in a one-semester course is impossible. The task force offers suggestions for organizing a short course. Following the standards is a sample unit plan that integrates the standards into a variety of lesson strategies. At the end of the document, appendixes provide resources for educators and other interested stakeholders.

The task force views this publication as a "living document." All of the standards have been reviewed by numerous educators and scientists and revised extensively. We welcome your comments and suggestions on the feedback.

The task force endorses a balanced approach to the teaching of psychology. We are convinced that understanding, predicting, and changing behavior are worthwhile undertakings for high school students. We think all students should enroll in introductory psychology courses that will help them accomplish these ends. These standards were designed to help ensure quality, to express goals, and to promote change in the teaching of the high school introductory psychology course. The public has a right to expect a course in psychology to meet criteria for quality. Expectations with respect to goals should be clear. Standards should be high but attainable. This document represents a vision of what students should know and be able to do after completing the high school psychology course.

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* Performance indicators are suggested, but others can be created by teachers to meet the unique needs of their students.

Components of Quality High School Psychology Education

The foundation of quality secondary school psychology education is the understanding, articulation, and dissemination of psychology as a science. Furthermore, the psychology curriculum should infuse perspectives fostering students' growth, development, and understanding of cultural diversity. Desirable, compatible, and common principles characterize quality secondary school psychology curricula.

The following are recommendations in continuing efforts to review, maintain, and revise psychology curricula.

Students

Quality high school psychology curricula should establish high and clear expectations for students, emphasizing active learning and providing ongoing progress. The curriculum should also encourage drawing on and responding to students' diverse characteristics as a means of enrichment.

Students learn about psychology in numerous environments. These environments include but are not limited to classrooms, field experiences, laboratories, media, clubs, science fairs, and informal contact with teachers. Environments should encourage students to explore their abilities, interests, and values while becoming increasingly independent in their decision making.

In support of student advising, faculty should be provided with administrative support of activities, staff development opportunities, and tangible rewards for excellence. Resources necessary for innovative programs, technological access, and research activities should also be provided.

Teachers

Quality high school psychology curricula should be taught by faculty who foster learning through teaching, technological access, and relevant research applications. Faculty should also nurture different outlooks among students and staff through the infusion of various cultural and ethnic perspectives.

Faculty should share information and effective practices with colleagues, while viewing educational development as a lifelong process that includes professional development; technological training; and participation in local, state, and national conferences.

Curricula

Quality high school psychology curricula should emphasize the empirical examination of behavior and mental processes. The curriculum should aid in the understanding of diversity while fostering the pursuit of postsecondary school education and careers in psychology.

Clear and rigorous goals are essential. These goals should include the integration of natural and social sciences; examination of ethical scientific inquiry; and the critical analysis of research methods, statistics, and research designs. Goals should also include understanding scientific methods, speaking and writing effectively, and respecting diversity. Understanding how the study of psychology enables students to make informed judgments that strengthen the community should also be a goal.

We recommend inclusion of the following pedagogical techniques: active and collaborative learning, research projects, community service, understanding of diversity in behavior, and activities that increase.

Assessment is another critical element of a quality curriculum in high school psychology. Assessment of learning should include numerous, valid, and varied measures of student learning. These will address not just content of psychology courses but relevant skills, including skilled use of technology.

Pedagogy

Population experts predict an American population consisting of 50 percent ethnic minority groups by the year 2060. Births from the steady interracial marriage rate increase could move this demographic shift up anywhere from 5 to 15 years. The changing face of America challenges our understanding of human behavior. Diversity, including cultural, age, and gender issues, must be addressed in high school psychology courses.

For many students, the high school population is not representative of the national population. The psychology course is an excellent way to expose students to the diversity missing from their communities. This exposure fosters an understanding of similarities and differences in human behavior and mental processes across all dimensions (e.g., cultural, ethnic, racial, age, religious, gender, ability/disability, and sexual orientation) of diversity.

Teachers must help students develop skills for adapting to a rapidly changing, interdependent world. This world demands an understanding of and sensitivity to diversity, critical thinking, and skills promoting life-long learning (National Institute of Education (NIE), 1984). Psychology teachers must be up to date on pedagogical techniques designed to achieve these goals. These techniques include (but are not limited to) cooperative learning, classroom demonstrations, research projects, community service, and specialized activities designed to increase the understanding of diversity in behavior.

Promoting Active Learning in Psychology Courses

Foreword

The Task Force for the Development of National High School Psychology Standards gratefully recognizes the impressive work done for the Active Learning Committee from APA's 1991 St. Mary's Conference on Enhancing the Quality of Undergraduate Education in Psychology. We adopted many of the ideas they expressed in the chapter written for the National Standards for the Teaching of High School Psychology. We have modified the chapter to reflect our emphasis on the high school psychology course.

What takes place in the classroom is determined by many variables. The nature of the discipline; characteristics and goals of the teacher, students, and the school; and contemporary needs and expectations of society interact to influence what is taught, how it is taught, and how it is received. Increasingly, we evaluate the quality of education in terms of responsiveness to the characteristics and needs of students in the classroom environment. In the classroom of the next century, teachers will continue to deal with a student population that is diverse in terms of ethnicity, educational goals, background, learning styles, and socioeconomic status. In response to this diverse student population, changes in the structure of the learning environment and the teaching strategies used in the classroom are needed (American Association of Community and Junior Colleges [AACJC], 1988; Cheney, 1989; Chickering, 1981; Kolb, 1984).

Teachers must help students develop skills for adapting to a rapidly changing, interdependent world. This world will demand that students think critically and synthesize large quantities of new information, show sensitivity to diversity, and develop attitudes and skills that promote lifelong learning (National Institute of Education [NIE], 1984). However, reports on the quality of education in the United States (Association of American Colleges [AAC], 1985; Baker, Roueche, & Gillett-Karam, 1990; McKeachie, Pintrich, Lin, Smith, & Sharma, 1990; NIE, 1984, 1988) point out that there is too much information being offered to students with too little attention paid to the strategies for learning, inquiry, and problem solving. To enhance the quality of education, we must use strategies that foster critical thinking and problem-solving skills and instill a willingness and motivation to continue learning beyond the classroom (AAC, 1985). As McKeachie et al. (1990) stated, "When one takes lifelong learning and thinking as a major goal of education, knowledge becomes a means rather than an end...A course that dulls the student's curiosity and interest must be a failure no matter how solid the content" (p. 1).

To meet these challenges, advocates for educational reform have included among their recommendations the need for teaching that stimulates active learning. The National Institute of Education's (NIE) 1984 report, *Involvement in Learning: Realizing the Potential of American Higher Education*, promoted active learning as the number one priority in American education, noting that it is crucial for the development of higher cognitive abilities.

We hope that this position statement will be an impetus to teachers who have, as yet, made little use of active learning in their courses. After identifying the principles of active learning and discussing its rationale, we describe how it can be incorporated into psychology courses. We also respond to concerns and problems that discourage its use. We describe the principal teaching practices that increase active learning and suggest additional resources detailing such methods.

Design Principles of Active Learning

Active learning connotes an array of learning situations in and out of the classroom in which students enjoy "hands-on" and "minds-on" experiences (e.g., Benjamin, 1991; Brothen, 1986; Frederick, 1987). Students learn through active participation in simulations, demonstrations, discussions, debates, games, problem solving, experiments, writing exercises, and interactive lectures (Schomberg, 1986).

This chapter identifies several design principles of active learning activities. Active participation by students is a key component of active learning, but other features must be present as well.

1. Active learning should involve the entire class. Demonstrations, for example, that involve a few students may be active learning for students doing the activity but not for the class as a whole.

2. Active learning is most effective when students understand the relevance of the exercise to the subject matter at hand, to the content of their other course work, or to the events of the students' everyday life.
3. Active learning stimulates learning at higher cognitive levels (Wittrock, 1984). These methods require students not only to know and comprehend, but prompt them to apply, analyze, synthesize, and evaluate (Bloom, 1956).
4. Active learning methods vary in the time they require in class and out of class. An instructor can design short activities for a few minutes of class time or design an entire course with active learning as the sole learning practice.
5. Active learning exercises involve feedback to students (but not necessarily graded feedback). Such feedback may come from the instructor or from other students in the class, but it should be planned into the activity, ideally at the time of or soon after the learning experience. Out-of-class activities should involve feedback in a later class.
6. Active learning approaches must take into account student reluctance to participate. Teachers must respect students' right to privacy and not compel them to participate in activities that would have negative social consequences.

Why Should We Promote Active Learning?

Effective teachers care passionately about their subject matter and their students. They are concerned with getting their students to hone their skills in writing and speaking; to extend their abilities in critical thinking and analysis; and to develop their capacities to synthesize, imagine, and create. These capacities and skills are the truly enduring effects of education (NIE, 1984, p. 28).

Active learning activities are opportunities to develop these capacities and skills. "The lecture has many advantages, particularly in communicating to large numbers of students, but research suggests that a mix of teaching styles can be an effective device for increasing [student] involvement" (NIE, 1984, p. 27). Furthermore, using a variety of teaching styles can accommodate the diverse learning styles students bring to the classroom (Kolb, 1984). Therefore, we are not proposing that faculty stop giving lectures. Rather, we are encouraging faculty to broaden their pedagogical techniques by replacing some lecture time with active learning techniques.

Student-generated learning activities have been shown to enhance student interest in courses, to foster intrinsic motivation for learning, and to create an interest in lifelong learning (Weimer, 1987). Authors of the NIE (1984) report concluded:

> There is now a good deal of research evidence to suggest that the more time and effort students invest in the learning process and the more intensely they engage in their own education, the greater will be their growth and achievement, their satisfaction with their educational experiences, and their persistence in college, and the more likely they are to continue their learning. (p. 17)

Active learning exercises increase the cognitive demands on students. They produce intellectual discrepancies that motivate the development of improved cognitive abilities such as critical thinking (Gorman, Law, & Lindegren, 1981; Halonen, 1986). Active learning involves elaboration of meaning, enhancement of context, and information processing at different levels. These are cognitive practices that facilitate learning and retention (Birch, 1986; DiVesta & Peverly, 1984; Hamil & Janssen, 1987; Hutchings & Wutzdorff, 1988; Slate & Charlesworth, 1989).

Students benefit in other ways as well. Active learning has also been shown to improve interpersonal communication and human relations skills (Neer, 1987) and self-esteem (Johnson & Johnson, 1987). Because active learning exercises encourage students to talk with and learn from one another, students are exposed to different ideas and perspectives that offer social and cultural breadth (Bouton & Garth, 1983; Slavin, 1983). By encouraging student responses, active learning exercises engage their interests, thereby accommodating different learning styles and cultural backgrounds (Kolb, 1984; Lee, 1986). In the next section, we discuss some of the issues teachers should consider before incorporating active learning strategies into their courses.

Using Active Learning

Like any pedagogical technique, active learning requires planning. Teachers must consider their students' reactions to this style of teaching and set the stage for its use. Instructors must determine the types of activities to use and when and how to integrate the activities with the course content.

Providing an overview. At the beginning of the course, teachers should give students a detailed description of the active learning processes that will be used and how active learning fits into the goals of the course. We should be telling students what is expected of them (participation, written work, discussion, etc.) during the semester and what can be expected of the teacher. Because students will be concerned about the grading process, we should provide information about evaluation criteria for these activities.

Motivating participation. The importance of motivation to the success of active learning is an overriding consideration (Lowman, 1990). We must motivate students to participate in discussions, exercises, and written assignments that are intellectually challenging and require commitment and personal investment on the part of students. Because we involve ourselves more fully in those activities we choose to pursue as opposed to those activities we are made to do, giving students a choice of the types of activities in which they engage and the degree to which they do so should increase students' willingness and motivation to participate (Deci & Ryan, 1985). They may believe that school-related choices are not truly their own, and they may prefer to avoid making such choices.

Fostering a positive climate. A learning environment must be carefully built; it does not automatically exist. Teachers should create a climate of trust if they hope for students to ask questions and participate in discussions. Faculty can build a rapport by interacting informally with students, working with them on common concerns, and communicating a passion for learning.

Fostering a positive classroom climate may be more difficult in psychology than in other academic topics. Psychology challenges some commonsense beliefs that are central to students' self-perceptions. Hence, the need to foster a positive climate needs to be balanced with the need for students to question their own most deeply held beliefs.

Setting limits. Instructors must be sensitive to issues of privacy (Matthews, 1991). In some cases, teachers must establish guidelines on the type and amount of disclosure that is appropriate. The potential problem is that for some activities, some students could disclose issues that may be inappropriate in a classroom setting (e.g., family dysfunctions, psychological disorders). Any student who wishes to discuss personal issues or problems in more depth should be encouraged to see the teacher for guidance and referrals.

Sensitivity to individual differences in learning and participation must be taken into account when considering limits to be placed on students. Some active learning procedures may be discomforting to those who are shy or who are not attuned to active discourse with teachers and fear to take such a risk (Neer, 1987). Individual differences arise from culture, gender, ethnicity, physical make-up, sexual orientation, personal history, and personality. These differences affect the type and amount of interaction in class. This is not to say that students should be excused from participation, but rather that teachers must be sensitive to the boundaries these students may bring to class (Bronstein & Quina, 1988).

Integrating activities. Active learning is not "do-it-yourself" learning; it must be thoroughly planned by an instructor. There is a salient and important active teaching component to active learning that calls for preparation of materials suited to the students and the course objectives. Instructors must review activities before selecting the most appropriate for the particular objectives to be met and for the level of students. Teachers must design active learning activities or modify existing ones to fit specific course situations and outcome expectations. Teachers must plan when to use an activity in class and consider how it will be integrated with the other activities and content of that class period. Instructors must think about the degree of structure to provide in the instructions, in carrying out the activity itself, and in the evaluation criteria. The type and amount of feedback to students and the criteria for evaluation should be determined in advance.

Evaluating activities. After teachers add active learning activities to their courses, teachers and students should have an opportunity to evaluate those activities. The easiest and most obvious evaluation is to determine whether the activity was successful in producing the general results the instructor wanted. Was the demonstration carried out smoothly and effectively? Did the discussion or writing assignments elicit the concepts, viewpoints, or principles the instructor had hoped would emerge? Was sufficient time allocated for the activity? With careful planning, procedural problems, if they occur, can be remedied without too much difficulty. We should give students instruction in how to provide nonjudgmental self- and peer evaluation and feedback for particular exercises. Students should be encouraged to analyze and synthesize information in a constructive and appropriate manner.

Outcome evaluation determines whether students learned what the instructor intended. This type of evaluation is more problematic. What processes ultimately occur in the student's "black box" are difficult to assess. However, a student's understanding of a concept taught by an active learning exercise must be assessed. Self- and peer reflection, which are often overlooked, are major elements in the process of analyzing the student's learning. Teacher assessment can include written or oral responses about what students learned, analysis of reasons for unexpected results, and tests of long-term retention and understanding of the exercises at the end of the course. Teachers might also include questions on the course evaluation instrument that assess students' perceptions of how the active learning activities engaged them in the learning process, facilitated learning of various concepts, and stimulated further thought or reading. Based on the outcome evaluations, teachers can revise active learning activities or delete them when other pedagogical techniques would be more useful.

Types of Activities

Active learning in note taking. Active learning can be applied in situations frequently regarded as passive. For example, students can be taught systems of note taking (see Pauk, 1984) that will engage them with the material in lectures. This approach can facilitate a dialogue between students and the teacher in the form of questions or comments for the teacher or even in comments that go no further than the students' notes.

Demonstrations and exercises. A chief method for active learning in the classroom involves demonstrations and exercises. Many suggestions are found in publications such as the *Activities Handbook for the Teaching of Psychology* (Benjamin & Lowman, 1981; Makosky, Sileo, Whittemore, Landry, & Skutley, 1990; Makosky, Whittemore, & Rogers, 1987), *Handbook for Teaching Introductory Psychology* (Benjamin, Daniel, & Brewer, 1985), *Teaching of Psychology* (the journal of American Psychological Association [APA] Society for the Teaching of Psychology), *Psychology Teacher Network* (APA's newsletter for psychology teachers from high school through college level), Handbook of Demonstrations and Activities in the Teaching of Psychology, Volumes I, II, III (edited by Mark E. Ware and David E. Johnson (Mahwah, NJ: Lawrence Erlbaum Associates, 1996)), and the instructor's manuals in most textbook packages. There is also a growing number of books describing exercises designed specifically to develop critical-thinking skills (Bell, 1991; Chaffee, 1991) and exercises for laboratories to accompany advanced courses (Abramson, 1990; Bennett, Hausfeld, Reeve, & Smith, 1981; Ewing, 1992; Power, Hausfeld, & Gorta, 1981).

Writing. Writing assignments are traditional techniques for active learning. Writing involves analysis and presentation of ideas, deliberate shaping and elaboration of one's thoughts, and considered feedback from the reader (Fulwiler & Young, 1990; Nodine, 1990). Writing assignments can range from modest in-class paragraphs and weekly self-reflection logs to extensive research papers (Tchudi, 1986). Although some may be graded, Maimon, Nodine, Hearn, and Haney-Peritz (1990) provided examples of several ungraded writing exercises. Even if not graded, however, all writing assignments should receive feedback from the teacher or other students.

Group activities. Group projects, exercises, or discussion groups are excellent opportunities for active learning. Dividing the class into small groups can be particularly helpful for fostering active learning in large classes. For example, Benjamin (1991) described several small-group and dyadic activities used in large classes.

Computer usage. Growing access to computers presents new possibilities for active learning. Stoloff and Couch (1992) compiled a directory of software for psychology courses, and Kahn and Brookshire (1991) described how to use computer bulletin boards and electronic mail as fast interactive ways to engage students in a course. In their

search for software that promotes active learning, teachers can profit from critical reviews (see *Teaching of Psychology* as well as reviews such as Anderson & Hornby, (1988); Beins, 1988, 1990; Hornby & Anderson, 1990) and testing the packages themselves to determine whether they meet specific active learning criteria.

Research. Student research is an important tradition in psychology training. It can involve varying levels of skill, commitment, independence, accountability, and active learning. Active learning in research can range from serving as a subject in an experiment and critically analyzing the experience to engaging in research activities incorporated into classes and laboratory courses. It can also involve working in a lab to learn laboratory techniques or conducting independent research to be presented as an honor's thesis, reported at a research conference, or prepared for publication. These activities help students become independent learners, formulating their own questions and seeking the answers to them (Beins, 1988; Ewing, 1991a, 1991b; Howancik, 1984; Kiernesky, 1984; Palladino, Carsrud, Hulicka, & Benjamin, 1982).

Community-based activities. Active learning may occur when students work in an applied community setting. Volunteer service projects provide opportunities for students to observe real problems and to use personal and academic knowledge and skills to solve them (Fernald et. al., 1982; Hutchings & Wutzdorff, 1988; Lestina, 1990; Sherman, 1982; VandeCreek & Fleischer, 1984; Ware & Millard, 1987).

Psychology clubs. Another active learning opportunity comes when students take initiative through their own organizations. Psychology clubs offer social, informational, and academic programs for psychology students. Students can generate program ideas, recruit speakers from among faculty or from the community, arrange field trips, evaluate the quality of their events, and so forth. These activities let students learn firsthand about organizational and group dynamics. Interaction with peers and faculty in student clubs promotes social and affective development through the sharing of different views and cultural perspectives in an informal and less evaluative context.

Problems Encountered in Using Active Learning

Although the benefits of active learning are supported by research, teachers may still not engage their students actively. Instructors advance numerous reasons for their reluctance to include active learning strategies.

Instructors believe they are already using active learning in their classes. Many faculty members have a basic misunderstanding of what active learning is, claiming that they are using such approaches just because they do not lecture constantly. Films, videotapes, and outside speakers do not constitute active learning simply because they are substituted for lectures, nor do classroom demonstrations. A rat that presses a bar in front of the students is a valuable demonstration, but it is active learning only for the rat. Active learning is not busywork (e.g., study guides or workbooks) meant to occupy students when teachers have extra time to fill. We believe active learning activities should involve the entire class, stimulate students to think critically about issues, and provide feedback about or evaluation of the activities.

Instructors believe that things are likely to go wrong. Fear of failure and evaluation apprehension are powerful motivators for using lectures instead of more active methods. Teachers fear that a failed demonstration will not make the point they wished or, worse, may leave a mistaken notion in students' minds. Instructors may make an implicit assumption that things do not go wrong in a lecture. They believe they have more control over what is presented in lectures. Evidence of a failed active learning activity is typically visible, because the activity requires evaluation or feedback. However, lectures may also go badly, but the evidence is less immediate or dramatic. Feedback during or after lectures is rarely requested; teachers simply assume that students understood and learned everything presented.

To decrease the chances of something going wrong, instructors can use active learning activities with published evaluative information (e.g., see Teaching of Psychology) or ones they have seen demonstrated. Even if an activity turns out differently from what was expected, instructors can evaluate what was good and what was bad and make appropriate adjustments for the future.

Active learning strategies require too much time to prepare, during the class period and for evaluation. Teachers take considerable time, energy, and commitment to organize activities, integrate them into the course, prepare materials,

provide students with appropriate background, and conduct the evaluation. Preparation for classes is time-consuming. Developing good lectures can be as time-consuming as creating active learning activities. One can argue that once a lecture is written, it can be given repeatedly; unfortunately, that is one of the possible drawbacks of lectures—they can lose their spontaneity and currency. Active learning strategies may also be used more than once, but because they are new for the students who are doing them, spontaneity will always be present. Some instructors are concerned about the time needed during class to conduct active learning exercises. They fear that limited learning will emerge from a single demonstration that may take half a class period. Another fear is that details of an activity will obscure the point being made in an exercise or that the activity may destroy the flow of information during the lecture so that the relevance of connected, consecutive ideas may be lost to students. There is also the concern that the class will not have enough time during the semester to cover all essential material.

Such concerns have a logical basis, but the assumption that underlies them may be questionable. Teachers assume that students leave lectures knowing the main points that were covered; however, students' answers on tests often surprise even the most optimistic and supportive teachers (Barnette, 1947). Ericksen (1983) found that meaningful material was retained longer than a myriad of facts learned by rote. The goal of active learning strategies is to put the focal points in a meaningful context so that students understand them and know how they relate to other information and to their own experience. The personalized learning that can result from active learning exercises may help students remember better what they learn. "We learn more, and more deeply, when learning touches on things that we care about" (Hutchings & Wutzdorff, 1988, p. 12).

Instructors concerned about time constraints should keep in mind that they do not have to cover in class everything in the textbook. As Benjamin (1991) pointed out, class time can be used to clarify material that is not explained well in the textbook and to present material that is not in the textbook.

With respect to evaluation, every exercise does not have to be graded, but feedback is absolutely crucial to point out to students their strengths and weaknesses and to document that they have learned what they need to know. To reduce the time commitment to evaluation without sacrificing feedback, students can provide self-evaluation, or peer evaluations can provide feedback. Instructors should present clear and concrete criteria for student performance.

Instructors believe that an active learning approach does not fit their teaching styles. Although some instructors believe active learning techniques are important teaching techniques, they resist using them because this approach does not fit their own teaching and learning styles. Their own experiences may lead instructors to believe that the only way to learn material is to hear it directly from an instructor's mouth (Svinicki & Dixon, 1987). The faculty member's job is to present knowledge; the students' job is to acquire knowledge.

We are not recommending wholesale change in educational philosophy and practice. We are encouraging faculty to move gradually from solely lecture to a style that incorporates active learning strategies along with lectures. Pedagogical diversity should broaden the appeal of courses and improve our ability to reach students with different learning styles.

Active learning and teaching are insufficiently rewarded. There are few external rewards for teaching. Teachers think that they have too little time, and they believe that time spent on improving teaching may not be highly regarded by their colleagues.

There are rewards for using active learning within the classroom itself. Students' attitudes are often more positive; they tend to be more receptive to and willing to work at exercises that actively engage them in the learning process (Hutchings & Wutzdorff, 1988; Kolb, 1984; NIE, 1984). Instructors gain satisfaction from knowing that students are better prepared for later courses, not only in mastery of content but also in students' critical-thinking skills and greater sophistication in psychological investigation.

Active learning strategies bring intrinsic rewards to instructors. Examining the content of a course from a new perspective, learning more about the intellectual and social development of students, and developing and honing new teaching skills are exciting challenges.

Conclusions and Recommendations

To summarize, active learning is a valuable pedagogical tool. Students benefit from well-planned active learning activities that are meaningfully integrated into the course, that allow analysis and discussion of what students have experienced, and that provide feedback about what students have learned. There may be obstacles to overcome before active learning can be incorporated successfully into courses or the entire curriculum, but these obstacles are not insurmountable.

Conclusion: High School Psychology in the Context of History

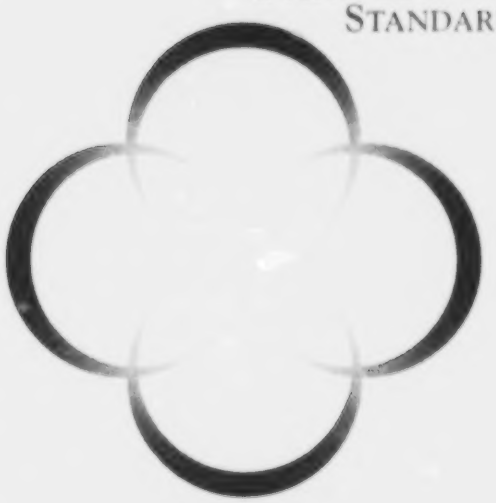
In the 19th century, philosophers debated the feasibility of psychology as a science. Could there be a science of mind? They wondered. Could the mind study itself with the measure of objectivity required in science? Would the centuries-old questions of mind and body, of nature and nurture remain the domain of philosophical discourse or would they become the basis of a new science? The question was answered in the last quarter of the 19th century by Wilhelm Wundt, who brought the philosophical questions of psychology into his Leipzig laboratory and showed that he could study scientifically the speed of mental processes, the qualities of sensation and perception, and the association of ideas. Wundt's work marked the beginning of a new discipline that has enjoyed more than a century of growth, accomplishments, and popularity. What began as a science of consciousness quickly involved a companion profession of applied psychologists who served as consultants and practitioners contributing to education, business, and the quality of everyday life. Although psychology emerged in Germany, it would thrive in the United States, and by the 1920s America could claim preeminence. More than half of the world's psychologists now work in the United States, and most of them are involved in the delivery of mental health services.

The public has a long history of fascination with the subject matter of psychology, and much of popular culture today (e.g., movies, television, books, and magazines) focuses on psychological topics. Psychology courses enjoy exceptional popularity in colleges and high schools; approximately 1.5 million college students take introductory courses each year, and another 800,000 are enrolled annually in high school psychology courses. Psychology is one of the two or three most popular majors on college campuses. A recent article in *Money* magazine listed "psychologist" fourth among the most promising careers for the next decade.

It should not be surprising that psychology enjoys such current popularity. Nor should that popularity diminish in the foreseeable future. Think of the challenges that face our world today. Psychologists can help people learn how to conserve the planet's resources, reduce prejudice and discrimination, promote healthier lifestyles, build stronger family ties, and thrive in the challenges of the new information era. The list could be expanded, but the point should be obvious: Most serious problems facing the world today will not be solved solely by technologies generated from the natural sciences. These contemporary problems have significant *behavioral* components, which means that their solutions will involve the science and practice of psychology. Not surprisingly, many believe that psychology will be one of the most important contributors to the quality of life in the 21st century. Behavioral problems are difficult to solve; behavioral change is often difficult to achieve. However, as our understanding of human behavior grows, so does our ability to affect behavioral change.

The success of psychology in solving behavioral problems will depend, in part, on an educated citizenry versed in the critical-thinking skills that underlie science. The public must distinguish real psychology from the fads and pseudoscience of pop psychology. Individuals need to understand the multiple causes of behavior and have some knowledge of the methods that can produce behavioral change. There is no better place for these things to begin than in a science-based high school psychology course. These standards are an important step in improving the quality of such courses, and their adoption is crucial in providing high school students with the understanding they need to enhance the quality of their own lives as well as contribute more broadly to their world.

PART II:
STANDARDS



Structure of the Standards

No one psychology course can cover all of the standards described in this document. We think psychology can be well represented by including at least one unit from each of five "domains" of psychology described below. This proposal advocates a strategy for coping with the pressures high school psychology teachers feel to cover the entire content of the discipline of psychology in the high school psychology course. We recommend making judicious selections among the content areas available to suit the length of the course, needs of the students, and talents of the teachers.

High school psychology courses often reflect two basic approaches: They emphasize either the scientific basis of psychology or the personal insight and adjustment side of psychology. This emphasis may reflect the departmental home of the course in the high school structure or it may represent the training and preferences of the teacher.

The task force crafted standards in each of 15 content areas, or units, although introducing content in all of these areas may not be reasonable, given the time constraints in some courses. These standards are clustered into five content domains, and we recommend that all high school courses reflect content from all of them. Teachers are encouraged to select one or two units in each domain to fit their courses. For example, a one-semester course might include anywhere from 5 to 10 standard areas selected across the five content domains. (You will find examples of specific designs for different content configurations on pages 94-96.) Experienced teachers may find ways to integrate content listed under one domain with other domains as well, which is appropriate and desirable. Specific standards are listed only under the domain where they fit most clearly.

In addition to content specifications, a well-taught course should foster development of certain abilities and attitudes. For example, high school psychology students should develop curiosity about the causes of human behavior. They should learn to reject simplistic explanations of behavior in favor of richer, more complex approaches (other examples are outlined later, as "Course Objectives"). Some content standards may emphasize certain abilities and attitudes over others. However, course objectives should include the integration of abilities and attitudes across content domains.

Definitions of Content Areas

The following guidelines highlight the traditional content areas of the discipline.

In the **METHODS** Domain

Introduction and Research Methods defines the science of psychology, describes its history, identifies the methods for examining behavior and mental processes, and reviews scientific careers available in the discipline.

In the **BIOPSYCHOLOGICAL** Domain

•*Biological Bases of Behavior* addresses how the brain processes information and how the body adapts to the demands of its environment.

Sensation and Perception examines how the brain makes meaning out of the physical sensations generated by the environment.

Motivation and Emotion examines the drives and needs that direct behavior, including sex, thirst, hunger, and social needs, as well as the range of human emotions. Social and Cultural Dimensions of Behavior Psychology explores how we perceive the social world and how we behave in relation to other people.

Stress, Coping, and Health identifies how stress reactions hinder our effectiveness and proposes alternatives that lead to a healthier existence.

• Designates a standard area preferred over others in this domain for its overall impact on student development.

In the **COGNITIVE** Domain

Learning demonstrates how we make changes in our behavior through experience with the environment, usually focusing on classical conditioning, instrumental conditioning, and cognitive learning.

Memory addresses how we remember as well as how we can improve memory.

Thinking and Language examines the role of language, problem-solving skills, creativity, multilingualism, and intelligence testing as primary interests of researchers in this area.

States of Consciousness explores varying stages of awareness, including sleep, reactions to drugs, daydreaming, and controlled conscious processes.

In the **DEVELOPMENTAL** Domain

Lifespan Development examines how nature and nurture influence our development from conception until death.

In the **SOCIOCULTURAL** Domain

Individual Differences focuses on how psychologists measure and compare individuals abilities and characteristics. This unit emphasizes test construction, test selection appropriate to the context, and objective and fair-minded interpretation.

Personality and Assessment demonstrates scientific explanations of personality development along with the methods psychologists use to measure personality concepts.

Psychological Disorders investigates patterns of behavior that are considered deviant or distressful in our culture and includes how psychologists diagnose these patterns.

Treatment of Psychological Disorders discusses the various intervention methods, including psychotherapy and medical interventions, that mental health practitioners use in treating abnormal conditions.

Social and Cultural Dimensions of Behavior explores how we perceive the social world and how we behave in relation to other people. This unit also explores how social and cultural contexts influence behavior.

Content Standards and Domains

The five content domains are Methods, Biopsychological, Cognitive, Developmental, and Social–Emotional. The content standards are organized according to these domains as follows:

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Central to the objectives of a well-designed psychology course is an emphasis on scientific method. Our placement of **METHODS** at the center of the model underscores the importance of teaching the content and skills consistent with the science of psychology as the core activity of the course. We believe that a unit involving *Introduction and Research Methods* should be taught as a formal unit in the beginning of the course, but research methods should also be a prominent feature of units taught in other domains. The Task Force for the Development of National High School Psychology Standards recommends that historical aspects of psychology beyond those introduced in the **Methods Domain** be infused throughout the units to structure the course.

We endorse the importance of emphasizing biological processes in understanding human behavior in the **BIOPSYCHOLOGICAL** content domain. *Biological Bases of Behavior* is the unit we recommend in the physiological domain for the greatest emphasis; however, teachers may also include additional units in this domain to reinforce psychology's tie to biological processes. Standards for *Sensation and Perception, Motivation and Emotion,* and *Stress, Coping, and Health* also reflect this tie.

We address the importance of understanding cognitive processes in the **COGNITIVE** domain. *Memory* is the unit we recommend in the cognitive domain for the greatest emphasis, if selections in the cognitive area must be restricted. However, cognitive processes are also explored in the areas of *Learning, Thinking, and Language,* and *States of Consciousness* when more time can be spent in this domain.

The **DEVELOPMENTAL** domain provides learning opportunities about processes that occur throughout life. *Lifespan Development* offers a context in which students can explore what people have in common as well as how they differ. Exploration of individual, generational, and cultural patterns in human development is crucial in developing strategies for adapting to change. The course should give students the knowledge, attitudes, and skills that will help them understand and appreciate our multicultural society. This content area is crucial in developing strategies for adapting to change.

The final domain, **SOCIOCULTURAL,** has intrinsic appeal to high school students. Because each of these standards can effectively introduce students to the major themes and concepts of the domain, we do not endorse one particular content area over another. Typically, teachers will elect two or more units to represent social and emotional processes. The psychology course should provide substantive content and opportunity for self-examination of the student's personal attitudes to promote understanding of differences in people who vary by ethnicity, race, class, sexual orientation, religion, gender, and able-bodiedness.

Course Objectives

The Task Force for the Development of National High School Psychology Standards developed course objectives to emphasize how students are likely to change as a result of their experience in the high school course. The objectives reflect performance expectations across content domains.

Objective 1: **Overall Content Goal**

To understand the methodological aspects of the discipline of psychology as well as the biopsychological, cognitive, developmental, and sociocultural processes of human behavior

> *Students would demonstrate an acceptable degree of mastery of the basic concepts, principles, and processes of psychology with the understanding that social behavior and attitudes are largely learned. This learning is situated in historical times. Thus, the historical experience of certain groups of people who have been regarded as racial or ethnic minorities, and even inferior at different times in history, will necessarily be part of the curriculum. Specifically, the historical attitudes that disenfranchised American Indians, Africans, Asians, and Hispanics from civil rights and educational and legal recourse become a context in which to understand certain group values, some behaviors, and intergroup process. The psychology course should provide substantive content and opportunity for self-examination of the student's personal attitudes in order to promote effective understanding of differences in people who vary by ethnicity, race, class, sexual orientation, religion, age, gender, and able-bodiedness. Integrating frameworks for understanding diversity in the curriculum will also support the development of critical thinking skills.*

Objective 2: **Scientific Reasoning**

To improve in the ability to reason scientifically about behavior

- Observe/listen accurately.
- Analyze (interpret) examples of behavior cautiously.
- Read and interpret psychological findings.
- Use several perspectives to explain causality.
- Require evidence for casual conclusions.
- Evaluate the quality of psychological findings.
- Practice ethical standards.
- Evaluate generalizability of results from sample to larger more diverse populations.

People skilled in this ability would be unlikely to accept simplistic solutions or conclusions based on a single instance of behavior. These individuals are likely to reject pseudoscientific explanations or to accept conclusions without analyzing the soundness of the argument. Such people would be less inclined to make logical errors in interpreting behavior.

Objective 3: **People Skills**

To improve in the ability to interact effectively with others

- Use psychological concepts meaningfully to explain behavior in speaking and writing.
- Demonstrate ability to use technology to enhance analysis and communication.
- Interact appropriately with others in interpersonal and group contexts.
- Manage the challenges of working with people from diverse backgrounds.
- Develop the ability to understand issues from diverse points of view.
- Enact practices that promote respect and trust (e.g., honesty, fair-minded judgment, and reliability).

People skilled in this ability would avoid using "psychobabble." Such individuals connect with others in different formats using different modes of communication. They would show enthusiasm for the prospect of working with people from diverse backgrounds. Although they may make mistakes, they strive to maintain trust-promoting character traits, values, and practices.

Objective 4: **Values of Psychology**

To reflect the values of the discipline of psychology

- Demonstrate enhanced curiosity about understanding people.
- Recognize the breadth and complexity of behavior and mental processes.
- Recognize the need for scientific explanations of behavior.
- Appreciate the role of technology in expanding psychology's boundaries.
- Recognize the importance of lifelong learning to improve adaptability.
- Acknowledge the role of psychology in promoting human welfare.
- Appreciate how culture provides a context for learning and producing behavior.

Students would emerge from their first exposure to psychology with a rich appreciation of the nature of psychology. Although the majority of students will not become psychologists, they would be favorably disposed toward the potential role that psychology—its principles, processes, and professionals—may play in their lives.

Linking Content Domains With Characteristics of Psychological Thinking

The content domains not only provide a means of structuring content standards, but they can also organize the specific characteristics of "thinking like a psychologist." Although these characteristics are likely to be apparent throughout the psychology course, the model below highlights where these characteristics can be emphasized within specific content domains.

Students will vary in their demonstration of these characteristics before, during, and even after their exposure to psychology. However, we propose these characteristics as an ideal that captures the nature of psychological thinking. As with the skills discussed in the previous section, experienced teachers may work toward integrating these characteristics across the domains.

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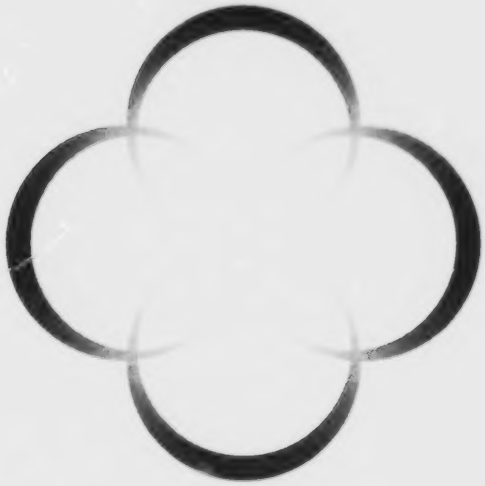
KEY TO STRUCTURE OF THE STANDARDS



Key to Structure of the Standards

Example From Standard Area:
Sensation and Perception

Standards are grouped within units

Each content standard describes what **the student** should know and understand after completing the unit in a high school course.

Each content standard is numbered **sequentially** within a unit of instruction.

Each performance standard states what **the student** should be able to do on the basis of knowing and understanding the content standard.

The number of each performance standard **is keyed** to the content standard to which it applies.

Performance indicators describe possible **opportunities** for students and teachers to demonstrate and assess the standard.

Standard Area: Sensation and Perception

Content Standards—Students understand:

1. Basic concepts explaining the capabilities and limitations of sensory processes

2. Interaction of the environment and the person in determining perception

3. Nature of attention

Content standards with performance standards and *suggested* performance indicators:

For Content Standard, **"1. Basic concepts explaining the capabilities and limitations of sensory processes,"** students are able to:

1.1 **Explain the concepts of threshold, adaptation, and constancy.** Students may indicate this by:
- Devising demonstrations
- Providing real-life examples of threshold, adaptation, and constancy

1.2 **Describe the operation of sensory systems.** Students may indicate this by:
- Labeling a diagram of the parts of the eye and ear and explaining the role of the parts
- Explaining the operation of other sensory systems, such as taste

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METHODS
DOMAIN

Standard Area: Introduction and Research Methods

Content Standards

After concluding this unit, students understand:

1. **Contemporary perspectives used by psychologists to understand behavior and mental processes in context**
2. **Major subfields and career opportunities that comprise psychology**
3. **Research strategies used by psychologists to explore behavior and mental processes**
4. **Purpose and basic concepts of statistics**
5. **Ethical issues in research with human and other animals that are important to psychologists**
6. **Development of psychology as an empirical science**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Contemporary perspectives used by psychologists to understand behavior and mental processes in context

Students are able to (performance standards):

1.1 Describe and compare the biological, behavioral, cognitive, and sociocultural perspectives.

Students *may* indicate this by (performance indicators):

- Analyzing how each perspective would explain a concept such as aggression
- Evaluating the limitations of each perspective in assessing behavior and mental processes
- Comparing primary emphases of the different perspectives
- Examining historical factors that influenced the popularity of a selected perspective

CONTENT STANDARD 2: Major subfields and career opportunities that comprise psychology

Students are able to (performance standards):

2.1 List and explain the major subfields of psychology.

Students *may* indicate this by (performance indicators):

- Identifying the different subfields of psychology, such as clinical, counseling, social, experimental, and developmental psychology
- Recognizing applied specializations, including forensic, community, industrial/organizational, cross-cultural, sports, or rehabilitation psychology among others
- Explaining the differences between a psychologist and psychiatrist
- Exploring career opportunities for college graduates with psychology majors

2.2 Examine the role of ethics in research and professional practice.

Students may indicate this by (performance indicators):

- Describing the ethical obligations of psychologists
- Role-playing an ethical dilemma related to psychology

CONTENT STANDARD 3: Research strategies used by psychologists to explore behavior and mental processes

Students are able to (performance standards):

3.1 Describe the elements of an experiment.

Students *may* indicate this by (performance indicators):

- Identifying the independent and dependent variables, possible confounding variables, and control and experimental groups in a description of an experiment
- Designing an experiment in which the hypothesis, population, sample, independent variable, dependent variable, and experimental and control groups are properly identified

3.2 Explain the importance of sampling in psychological research.

Students *may* indicate this by (performance indicators):

- Identifying examples of representative and biased samples in research designs

- Explaining the importance of being able to generalize results of research
- Describing how sample selection (e.g., representation of gender, ethnicity, age, etc.) influences results

3.3 Describe and compare quantitative and qualitative research strategies.

Students *may* indicate this by (performance indicators):

- Explaining the characteristics of surveys, naturalistic observation, case studies, longitudinal studies, cross-sectional research, and experiments
- Identifying the suitability of a given method for researching a given hypothesis
- Specifying the populations to which a particular research result may be generalized

CONTENT STANDARD 4: Purposes and basic concepts of statistics

Students are able to (performance standards):

4.1 Define descriptive statistics and explain how they are used by behavioral scientists.

Students *may* indicate this by (performance indicators):

- Providing examples of situations in which descriptive statistics can be used to organize and analyze information
- Explaining how statistical analysis can add value to the interpretation of behavior
- Citing a statistical finding to strengthen an argument

4.2 Explain and describe measures of central tendency.

Students *may* indicate this by (performance indicators):

- Calculating the mean, median, and mode for a set of data
- Explaining the characteristics of a normal distribution
- Providing examples of psychological variables that tend to be normally distributed
- Applying the concepts of range and standard deviation to supplement information about central tendency in a normal distribution

4.3 Describe the concept of correlation and explain how it is used in psychology.

Students *may* indicate this by (performance indicators):

- Differentiating between positive, negative, and zero correlations
- Identifying and providing examples of how correlations can be used to predict future behavior or performance
- Explaining the difference between correlation and causation

4.4 Recognize how inferential statistics are used in psychological research.

Students *may* indicate this by (performance indicators):

- Recognizing the basic process that psychologists use to draw statistical inferences
- Defining statistical significance as a statement of probability

CONTENT STANDARD 5: Ethical issues in research with human and other animals that are important to psychologists

Students are able to (performance standards):

5.1 Identify ethical issues in psychological research.

Students *may* indicate this by (performance indicators):

- Discussing ethical issues in psychological research
- Identifying historical examples of research that may have departed from contemporary ethical standards
- Acknowledging the importance of adhering to APA ethical standards in working with human and other animal subjects
- Discussing the pros and cons of the use of human and other animals in psychological research, including their ethical treatment

CONTENT STANDARD 6: Development of psychology as an empirical science

Students are able to (performance standards):

6.1 Discuss psychology's roots in philosophy and natural science.

Students *may* indicate this by (performance indicators):

- Describing the form psychology took before the 20th century (e.g., Aristotle, Locke)
- Summarizing some 19th century physiological research findings (e.g., Helmholtz, Weber, and Fechner)
- Analyzing how philosophical issues become psychological when tested empirically

6.2 Describe the emergence of experimental psychology.

Students *may* indicate this by (performance indicators):

- Defining psychophysics and describing its impact on empirical psychology
- Identifying Wilhelm Wundt's contributions to experimental psychology
- Comparing philosophical argument with the empirical method

6.3 Recognize the diversity of psychological theories in the 20th century.

Students *may* indicate this by (performance indicators):

- Describing the major 20th century "schools" of psychology (e.g.,behaviorism, Gestalt psychology, psychoanalysis, humanistic psychology)
- Showing how different theories of psychology produce different explanations of a particular behavior (e.g., truancy, altruism)

6.4 Describe psychology's increasing inclusiveness of diverse interests and constituents.

Students *may* indicate this by (performance indicators):

- Comparing the diverse topics that generate contemporary research with early research emphases
- Identifying how research biases have influenced research design and scope
- Exploring reasons why psychology had more limited participation from women and ethnic minorities in its early stages
- Highlighting contributions by ethnic minority psychologists
- Describing historical events and processes affecting the experiences, opportunities, and processes affecting minority groups

BIOPSYCHOLOGICAL
DOMAIN

Standard Area: Biological Bases of Behavior

Content Standards

After concluding this unit, students understand:

1. **Structure and function of the neuron**
2. **Organization of the nervous system**
3. **Hierarchical organization of the structure and function of the brain**
4. **Technologies and clinical methods for studying the brain**
5. **Specialized functions of the brain's hemispheres**
6. **Structure and function of the endocrine system**
7. **How heredity interacts with the environment to influence behavior**
8. **How psychological mechanisms are influenced by evolution**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Structure and function of the neuron

Students are able to (performance standards):

1.1 Identify the neuron as the basis for neural communication.

Students *may* indicate this by (performance indicators):

- Using diagrams, models, and/or computer programs to identify the structure and function of different parts of a neuron
- Discussing how internal and external stimuli initiate the communication process in the neuron
- Describing the electrochemical process that propagates the neural impulse

1.2 Describe how information is transmitted and integrated in the nervous system.

Students *may* indicate this by (performance indicators):

- Describing the process of synaptic transmission
- Contrasting excitatory and inhibitory transmission

1.3 Analyze how the process of neurotransmission can be modified by heredity and environment.

Students *may* indicate this by (performance indicators):

- Comparing the effects of certain drugs or toxins with the effects of neurotransmitters in relation to synaptic transmission
- Discussing the role of neurotransmitters in Parkinson's disease, hyperactivity, and/or multiple sclerosis

CONTENT STANDARD 2: Organization of the nervous system

Students are able to (performance standards):

2.1 Classify the major divisions and subdivisions of the nervous system.

Students *may* indicate this by (performance indicators):

- Describing how views of the nervous system have evolved
- Identifying the central nervous system and its component parts
- Identifying the peripheral nervous system and its subdivisions

2.2 Differentiate the functions of the various subdivisions of the nervous system.

Students *may* indicate this by (performance indicators):

- Comparing the functions of the somatic and autonomic nervous systems
- Explaining the function of the sympathetic and the parasympathetic nervous systems on heart rate or other physiological responses in an emotional situation

CONTENT STANDARD 3: Hierarchical organization of the structure and function of the brain

Students are able to (performance standards):

3.1 Identify the structure and function of the major regions of the brain.

Students *may* indicate this by (performance indicators):

- Identifying the regions of the brain by using diagrams and/or computer-generated diagrams
- Summarizing the functions of the major brain regions

3.2 Recognize that specific functions are centered in specific lobes of the cerebral cortex.

Students *may* indicate this by (performance indicators):

- Describing the functions controlled by the frontal, parietal, occipital, and temporal lobes of the cerebral cortex
- Relating examples of research on cortical functioning

CONTENT STANDARD 4: Technologies and clinical methods for studying the brain

Students are able to (performance standards):

4.1 Explain how research and technology have provided methods to analyze brain behavior and disease.

Students *may* indicate this by (performance indicators):

- Describing how lesions and electrical stimulation in animal research provide information about brain functions
- Discussing how the use of the CAT scan, PET scan, MRI, and EEG provides information about the brain

CONTENT STANDARD 5: Specialized functions of the brain's hemispheres

Students are able to (performance standards):

5.1 Compare and contrast the influence on brain function between the left and right hemispheres.

Students *may* indicate this by (performance indicators):

- Identifying the role of the corpus callosum in hemispheric communication
- Identifying how vision, motor, language, and other functions are regulated by each hemisphere
- Explaining the purpose and findings of split-brain research

CONTENT STANDARD 6: Structure and function of the endocrine system

Students are able to (performance standards):

6.1 Describe how the endocrine glands are linked to the nervous system.

Students *may* indicate this by (performance indicators):

- Discussing the effect of the hypothalamus on the endocrine system
- Identifying the influence of fetal hormones on sexual differentiation of the central nervous system
- Giving examples of how hormones are linked to behavior and behavioral problems

CONTENT STANDARD 7: How heredity interacts with environment to influence behavior

Students are able to (performance standards):

7.1 Assess the effects of heredity and environment on behavior.

Students *may* indicate this by (performance indicators):

- Identifying the relationships among DNA, genes, and chromosomes
- Differentiating between genotype and phenotype
- Explaining how chromosomal abnormalities can cause Down and/or Turner's syndrome
- Using twin and adoption studies to assess the influence of heredity and environment on behavior
- Comparing results from inbred and outbred strains of rats and mice

CONTENT STANDARD 8: How psychological mechanisms are influenced by evolution

Students are able to (performance standards):

8.1 Explain how evolved tendencies interact with the present environment and culture to determine behavior.

Students *may* indicate this by (performance indicators):

- Describing how the environment selects traits and behaviors that increase the survival rate of organisms
- Providing examples of the interaction of evolutionary mechanisms with the environment in the areas of gender differences and aggression
- Comparing and contrasting mating behavior in animals and humans
- Discussing how cultures differ in their management of time

Standard Area: Sensation and Perception

Content Standards

After concluding this unit, students understand:

1. **Basic concepts explaining the capabilities and limitations of sensory processes**
2. **Interaction of the person and the environment in determining perception**
3. **Nature of attention**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Basic concepts explaining the capabilities and limitations of sensory processes

Students are able to (performance standards):

1.1 Explain the concepts of threshold, adaptation, and constancy.

Students *may* indicate this by (performance indicators):

- Devising demonstrations that illustrate threshold, adaptation, and constancy
- Providing real-life examples of threshold, adaptation, and constancy
- Describing historical examples of psychophysical research

1.2 Describe the operation of sensory systems.

Students *may* indicate this by (performance indicators):

- Labeling a diagram of the parts of the eye and ear and explaining the role of each part
- Explaining the operation of other sensory systems, such as taste and touch

1.3 List forms of energy for which we do and do not have sensory receptors.

Students *may* indicate this by (performance indicators):

- Comparing the sensory capabilities of humans and other species, such as the echo-detection system in bats
- Speculating about system limitations, such as human limits related to sensing the spectrum of light

1.4 Relate knowledge of sensory processes to applications in areas such as engineering psychology, advertising, music, architecture, and so on.

Students *may* indicate this by (performance indicators):

- Analyzing advertisements for their use of sensory information
- Finding examples of sensory principles in an area other than advertising, such as in music or textbooks

CONTENT STANDARD 2: Interaction of the person and the environment in determining perception

Students are able to (performance standards):

2.1 Explain Gestalt concepts and principles, such as figure-ground, continuity, similarity, proximity, closure, and so on.

Students *may* indicate this by (performance indicators):

- Finding examples of Gestalt principles
- Constructing demonstrations of Gestalt principles
- Explaining the significance of "the whole is greater than the sum of its parts"

2.2 Describe binocular and monocular depth cues.

Students may indicate this by (performance indicators):

- Analyzing how three-dimensional viewers or random dot stereograms use stereopsis to create depth
- Finding examples of monocular depth cues, such as linear perspective and relative size, in pictures, paintings, or photographs

2.3 **Describe the influence on perception of environmental variables, motivation, past experiences, culture, and expectations.**

Students may indicate this by (performance indicators):

- Analyzing the factors that influence the validity of eyewitness testimony (e.g., framing of questions, cross-racial identification problems)
- Speculating why students from different schools disagree about an official's call in a football game
- Comparing perceptions of school violence in urban, suburban, and rural communities from the standpoint of race/ethnicity, class, or gender
- Speculating about how perceptual principles may relate to stereotypes and prejudice
- Describing cross-cultural studies that illustrate cultural similarities and differences in perception

CONTENT STANDARD 3: Nature of attention

Students are able to (performance standards):

3.1 **Explain what is meant by attention.**

Students may indicate this by (performance indicators):

- Finding examples of selective attention and divided attention
- Identifying variables that draw attention to a particular event
- Identifying variables that influence the ability to divide attention
- Designing a demonstration that illustrates the difference between selective attention and divided attention, such as listening to a lecture while taking notes
- Relating signal detection theory to an everyday example

3.2 **Describe how attention differs for demanding versus simple tasks.**

Students may indicate this by (performance indicators):

- Analyzing the amount of attention required for demanding versus simple tasks
- Applying knowledge of attentional processes to design an ideal environment for homework

Standard Area: Motivation and Emotion

Content Standards

After concluding this unit, students understand:

1. **Motivational concepts**
2. **Biological and environmental cues instigating basic drives or motives**
3. **Major theories of motivation**
4. **Interaction of biological and cultural factors in the development of motives**
5. **Role of values and expectancies in determining choice and strength of motivation**
6. **Physiological, affective, cognitive, and behavioral aspects of emotions and the interactions among these aspects**
7. **Effects of motivation and emotion on perception, cognition, and behavior**

Content Standards With Performance Standards and Suggested Performance Indicators

CONTENT STANDARD 1: **Motivational concepts**

Students are able to (performance standards):

1.1 **Apply motivational concepts to the behavior of humans and other animals.**

Students *may* indicate this by (performance indicators):

- Describing their own motives, goals, and values
- Analyzing the goals and expectancies in a case study or vignette
- Identifying the values or motives appealed to in political campaigns or television advertisements
- Analyzing factors that may increase their intrinsic motivation for studying psychology
- Explaining how the effect of teacher praise or punishment on student motivation depends on the student's attribution
- Giving historic examples of how motivation has been studied in animals

CONTENT STANDARD 2: **Biological and environmental cues instigating basic drives or motives**

Students are able to:

2.1 **Describe the interaction of internal cues and environmental cues determining motivation derived from basic drives.**

Students *may* indicate this by (performance indicators):

- Explaining why one becomes hungry when one smells bread baking or hears an ice cream truck
- Discussing how the concepts of homeostasis and adaptation level can be applied in understanding motivated behavior

2.2 **Describe the situational cues giving rise to anger and fear.**

Students *may* indicate this by (performance indicators):

- Analyzing occasions on which they became angry or afraid
- Evaluating personal experiences of discrimination giving rise to fear and/or anger

2.3 **Describe the situational cues and individual characteristics giving rise to curiosity and anxiety.**

Students *may* indicate this by (performance indicators):

- Explaining why one person would be curious and another anxious in the same situation
- Discussing why one person responds to stereotyping without anxiety and another person responds with anxiety

CONTENT STANDARD 3: **Major theories of motivation**

Students are able to (performance standards):

3.1 **Describe one or more theories of motivation, such as expectancy value, cognitive dissonance, arousal, Maslow's hierarchy of needs, and drive reduction.**

Students *may* indicate this by (performance indicators):

- Applying Maslow's theory to make predictions about meeting need

- Citing research to support a theory of motivation
- Comparing and contrasting two theories of motivation

CONTENT STANDARD 4: Interaction of biological and cultural factors in the development of motives

Students are able to (performance standards):

4.1 Explain how common motives develop.

Students may indicate this by (performance indicators):

- Describing how the development of their own motives was affected by their parents, peers, as well as genetic and biological factors
- Describing changes in their own motivation from the beginning of the school year to the present
- Identifying how motivation for food develops
- Discussing how motives differ for those who drop out of school compared to those who stay in school

CONTENT STANDARD 5: Role of values and expectancies in determining choice and strength of motivation

Students are able to (performance standards):

5.1 Use expectancy-value theory to explain their own and others' behavior.

Students may indicate this by (performance indicators):

- Analyzing how expectancy-value theory explains how they spent their time the previous evening
- Using strategies for motivating themselves for desired behaviors, such as studying

CONTENT STANDARD 6: Physiological, affective, cognitive, and behavioral aspects of emotions and the interactions among these aspects

Students are able to (performance standards):

6.1 Describe theories of emotion, such as James-Lange, Cannon-Bard, or cognitive theories.

Students may indicate this by (performance indicators):

- Citing research to support a theory of emotion
- Comparing and contrasting two theories of emotion
- Discussing key ideas of emotional intelligence

CONTENT STANDARD 7: Effects of motivation and emotion on perception, cognition, and behavior

Students are able to (performance standards):

7.1 Describe differences in perception between individuals differing in motivation.

Students may indicate this by (performance indicators):

- Explaining how supporters of opposing football or basketball teams differ in their perceptions of possible fouls
- Comparing reactions of individuals to literary and artistic works

7.2 Explain how learning, memory, problem solving, and decision making are influenced by motivation and emotion.

Students may indicate this by (performance indicators):

- Describing the effect of motivation and emotion on their learning from the assignment for today's class
- Speculating about the effect of mood differences on behavior between Wednesday and Friday
- Gathering examples of advertisements or political appeals designed to motivate choice or behavior
- Explaining the relationship between level of arousal and performance

Standard Area: Stress, Coping, and Health

Content Standards

After concluding this unit, students understand:

1. **Sources of stress**
2. **Physiological reactions to stress**
3. **Psychological reactions to stress**
4. **Cognitive and behavioral strategies for dealing with stress and promoting health**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Sources of stress

Students are able to (performance standards):

1.1 Identify and explain major sources of stress.

Students *may* indicate this by (performance indicators):

- Defining frustration and giving examples of how it can be a source of stress
- Relating results of early research about stress effects on animals
- Explaining and giving examples of approach-approach, approach-avoidance, and avoidance-avoidance conflicts
- Explaining how the hassles of contemporary life are a source of stress
- Discussing how our cognitive appraisal of situations can cause stress
- Exploring how challenges in work environments, such as violence, harassment, and downsizing, can increase stress reactions
- Examining the impact of discrimination from sexism, heterosexism, racism, ageism, and so on
- Examining the impact of discrimination on persons who are visible immigrants by accent or phenotype
- Describing the impact of poverty on levels of daily stress

CONTENT STANDARD 2: Physiological reactions to stress

Students are able to (performance standards):

2.1 List and explain possible physiological reactions to stress.

Students *may* indicate this by (performance indicators):

- Comparing the results of initial fight or flight experiments with animals to human stress reactions
- Describing Selye's General Adaptation Syndrome (GAS)
- Describing how stress can affect the immune system

CONTENT STANDARD 3: Psychological reactions to stress

Students are able to (performance standards):

3.1 List and explain possible psychological reactions to stress.

Students may indicate this by (performance indicators):

- Relating personal examples of how stress can impair psychological functioning in such areas as work, school, and relationships
- Explaining how stress can affect neurotransmitter function, mood states, and immunity to illness
- Describing how stress may have positive outcomes
- Discussing how cultural differences can influence one's reaction to stress

CONTENT STANDARD 4: Cognitive and behavioral strategies for dealing with stress and promoting health

Students are able to (performance standards):

4.1 Identify and explain cognitive strategies to deal with stress and promote health.

Students may indicate this by (performance indicators):

- Describing how the use of problem solving and other cognitive strategies may help to cope with stress and

promote health
- Explaining how person versus situation attributions for life events can influence one's response to stressors and promote health

4.2 Identify and explain behavioral strategies to deal with stress and promote health.

Students may indicate this by (performance indicators):
- Explaining how defense mechanisms, regular exercise, relaxation, spiritual practices, and social support can help to alleviate some negative effects of stress and promote health
- Brainstorming ways in which changing behavior may alleviate some negative effects of stress and promote health
- Identifying behavioral strategies for coping with stress that can negatively influence health, such as smoking and substance abuse
- Discussing the pros and cons of seeking professional help to cope with stress

DEVELOPMENTAL
DOMAIN

Standard Area: Lifespan Development

Content Standards

After concluding this unit, students understand:

1. **Development as a lifelong process**
2. **Research techniques used to gather data on the developmental process**
3. **Stage theories of development**
4. **Issues surrounding the developmental process (nature/nurture, continuity/discontinuity, stability/instability, critical periods)**
5. **Impact of technology on aspects of the lifespan**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Development as a lifelong process

Students are able to (performance standards):

1.1 Describe physical, social, and cognitive changes from the prenatal period throughout the lifespan.

Students *may* indicate this by (performance indicators):

- Illustrating developmental changes in physical, cognitive, and social development
- Describing early research on child development
- Speculating on the interaction of physical, cognitive, and/or social changes in behavior
- Inferring how peer relationships change over time
- Describing similarities and differences in development across cultures
- Discussing the relative importance of peers' versus parents' influence in different cultural groups

1.2 Examine the nature of change over the lifespan.

Students *may* indicate this by (performance indicators):

- Describing how social roles change over time
- Examining how race, culture, gender, age, ethnicity, religion, sexual orientation, ability/disability, and so on affect our lives over the lifespan

1.3 Identify the complex cognitive structures found in the early development of infants and young children.

Students *may* indicate this by (performance indicators):

- Citing research on the capabilities of infants and young children
- Citing contemporary research, comparing and contrasting early views of infant capabilities with current understanding
- Discussing the role of the caregiver in promoting child development
- Speculating about how cultural practices in care providing may influence the character of cognitive development

1.4 Apply lifespan principles to personal experience.

Students *may* indicate this by (performance indicators):

- Comparing their own life experiences with general patterns of others from their generation
- Predicting their own developmental changes over time
- Describing transition from childhood to adolescence
- Explaining the transition from adolescence to adulthood

CONTENT STANDARD 2: Research techniques used to gather data on the developmental process

Students are able to (performance standards):

2.1 Explain the distinguishing characteristics of the longitudinal and cross-sectional methods of study.

Students *may* indicate this by (performance indicators):

- Describing key features of each research technique

- Evaluating strengths and weaknesses of each research technique
- Demonstrating how certain research techniques relate to specific developmental issues
- Identifying behaviors and characteristics across generations
- Explaining the advantages of using animals to study lifespan issues
- Relating details of a specific longitudinal or cross-sectional study and its impact for understanding human development

CONTENT STANDARD 3: Stage theories of development

Students are able to (performance standards):

3.1 Outline the stages of a developmental theory by theorists such as Piaget, Erikson, Kohlberg, Gilligan, Cross, Helms, and so on.

Students *may* indicate this by (performance indicators):

- Applying developmental theories to life situations
- Identifying limitations of stage theories

3.2 Recognize how biological and environmental factors linked to societal conceptions of gender shape the experiences of males and females.

Students *may* indicate this by (performance indicators):

- Explaining the differences between sex, identity, and roles
- Citing examples of how gender expectations and bias affect male–female behavior throughout the lifespan
- Explaining how gender identity develops
- Exploring how gender expectations may differ depending on ethnicity
- Identifying biological factors that may lead to gender differences and similarities

3.3 Examine the development of ethnic identity.

Students *may* indicate this by (performance indicators):

- Analyzing case studies that illustrate ethnic identity development
- Exploring effects of ethnic discrimination on development
- Identifying commonalties across racial and ethnic boundaries
- Examining theories on multiracial and multiethnic identity and the contexts in which they were developed

3.4 Explore developmental theories as they relate to cultural bias.

Students *may* indicate this by (performance indicators):

- Identifying how cultural differences affect development, such as in collectivist versus individualist cultures
- Evaluating strengths and weaknesses of developmental theories, such as Erikson's stage of identity versus role confusion, from the perspective of different cultures

CONTENT STANDARD 4: Issues surrounding the developmental process (nature/nurture, continuity/discontinuity, stability/instability, critical periods)

Students are able to (performance standards):

4.1 Describe the role of critical periods in development.

Students *may* indicate this by (performance indicators):

- Giving an example of a critical period in development
- Evaluating significance of critical periods in development
- Explaining difficulties of research in the area of critical periods
- Linking cortical development to enriched environments during critical periods

4.2 Explain the issues of continuity/discontinuity and stability/instability in development.

Students *may* indicate this by (performance indicators):

- Giving an example to illustrate continuity or discontinuity in development
- Citing research concerning stability or instability of traits over time

CONTENT STANDARD 5: Impact of technology on aspects of the lifespan

Students are able to (performance standards):

5.1 Discuss the influence of technology on quality of life.

Students *may* indicate this by (performance indicators):

- Debating the effects of media violence on aggressive behavior
- Contrasting definitions of quality of life across cultures that vary in technological development

5.2 Examine the role of technology in longevity.

Students *may* indicate this by (performance indicators):

- Investigating medical interventions for fertility and premature baby care
- Examining the moral dilemmas surrounding assisted suicide
- Examining cultural perspectives and values as they influence attitudes toward medical interventions

COGNITIVE
DOMAIN

Standard Area: Learning

Content Standards

After concluding this unit, students understand:

1. **Characteristics of learning**
2. **Principles of classical conditioning**
3. **Principles of operant conditioning**
4. **Components of cognitive learning**
5. **Roles of biology and culture in determining learning**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Characteristics of learning

Students are able to (performance standards):

1.1 Discuss learning from a psychological viewpoint.

Students *may* indicate this by (performance indicators):

- Listing the important historical figures in learning
- Defining learning as relatively permanent changes of behavior resulting from experience
- Distinguishing learning from performance
- Demonstrating the use of theories of learning in applied examples

1.2 Recognize learning as a vehicle to promote adaptation through experience.

Students *may* indicate this by (performance indicators):

- Articulating how changes in adaptation can result from genetic factors or learned experiences
- Comparing how cultures differ in promoting learned behavior

CONTENT STANDARD 2: Principles of classical conditioning

Students are able to (performance standards):

2.1 Describe the classical conditioning paradigm.

Students *may* indicate this by (performance indicators):

- Explaining how, according to Pavlov's theory, a neutral stimulus becomes capable of evoking a response through pairing with an unconditioned stimulus
- Labeling elements in classical conditioning examples
- Designing procedures to produce classically conditioned responses

CONTENT STANDARD 3: Principles of operant conditioning

Students are able to (performance standards):

3.1 Describe the operant conditioning paradigm.

Students *may* indicate this by (performance indicators):

- Describing how consequences influence behavior, such as reinforcement strengthening a behavior's occurrence
- Identifying consequences of punishment in controlling behavior
- Predicting future strength of behavior by applying operant conditioning principles
- Designing procedures to produce operant responses
- Applying operant conditioning to correcting behavior, such as using shaping, chaining, and self-control techniques
- Discussing Skinner's contributions to popularizing behaviorism
- Translating emotional responses related to stereotyping, prejudice, and discrimination in operant terminology

CONTENT STANDARD 4: Components of cognitive learning

Students are able to (performance standards):

4.1 Explain how observational learning works.

Students *may* indicate this by (performance indicators):

- Describing examples of learning by observation, such as Bandura's bobo doll study
- Identifying everyday examples of observational learning
- Discussing impact of role models

4.2 Describe cognitive learning approaches.

Students *may* indicate this by (performance indicators):

- Comparing learned behavior across cultures
- Exploring the role of expectation in promoting learning
- Differentiating insight learning from other forms of learning
- Describing how cognitive approaches differ from classical and operant conditioning

CONTENT STANDARD 5: Roles of biology and culture in determining learning

Students are able to (performance standards):

5.1 Identify biological contributions to learning.

Students *may* indicate this by (performance indicators):

- Describing biological constraints on learning
- Discussing adaptive value of one-trial learning, such as Garcia's taste-aversion studies

5.2 Speculate on the role of culture in determining what behaviors will be learned.

Students *may* indicate this by (performance indicators):

- Comparing learned behavior across cultures
- Describing environmental constraints on learning opportunities

5.3 Explore how biological and cultural factors interact to impede or enhance learning.

Students *may* indicate this by (performance indicators):

- Examining factors affecting academic performance that may differ for males and females (e.g., "chilly climate" effect on female students)
- Predicting how teacher expectancy can influence differential achievement for members of ethnic groups
- Debating whether sociocultural factors can reliably predict individual success
- Contrasting academic supports available for people who have learning disabilities with those who are gifted learners

5.4 Describe the collaborative nature of some forms of learning within cultures.

Students *may* indicate this by (performance indicators):

- Giving examples of group learning in different cultures
- Contrasting Vygotsky's approach to collaborative learning with individualistic theories

Standard Area: Memory

Content Standards

After concluding this unit, students understand:

1. **Encoding, or getting information into memory**
2. **Short-term and long-term memory systems**
3. **Retrieval, or getting information out of memory**
4. **Biological bases of memory**
5. **Methods for improving memory**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Encoding, or getting information into memory

Students are able to (performance standards):

1.1 Characterize the difference between surface and deep (elaborate) processing.

Students *may* indicate this by (performance indicators):

- Providing several examples each of surface and deep processing

1.2 Identify other factors that influence encoding.

Students *may* indicate this by (performance indicators):

- Demonstrating the role of imagery in encoding
- Developing examples of dual encoding, such as encoding both semantically and visually

CONTENT STANDARD 2: Short-term and long-term memory systems

Students are able to (performance standards):

2.1 Describe the operation of short-term memory.

Students *may* indicate this by (performance indicators):

- Explaining the duration and capacity of short-term memory
- Providing examples of the use of chunking to increase the capacity of short-term memory
- Conducting a demonstration that uses short-term memory
- Providing examples of primacy and recency effects

2.2 Describe the operation of long-term memory.

Students *may* indicate this by (performance indicators):

- Charting the duration and capacity of long-term memory
- Providing examples of episodic, semantic, and procedural memories
- Reporting the primary findings of Ebbinghaus' nonsense-syllable studies

CONTENT STANDARD 3: Retrieval, or getting information out of memory

Students are able to (performance standards):

3.1 Analyze the importance of retrieval cues in memory.

Students *may* indicate this by (performance indicators):

- Identifying contextual and state-related cues
- Examining problems related to incomplete retrieval, such as the tip-of-the-tongue phenomenon

3.2 Explain the role that interference plays in retrieval.

Students *may* indicate this by (performance indicators):

- Providing examples of proactive and retroactive interference
- Relating the concept of interference to studying school-related material

3.3 Relate difficulties created by reconstructive memory processes.

Students *may* indicate this by (performance indicators):

- Speculating about the role of reconstruction in claims of repressed childhood memories
- Speculating about the role of reconstruction in cases of eyewitness testimony

CONTENT STANDARD 4: Biological bases of memory

Students are able to (performance standards):

4.1 Identify the brain structures most important to memory.

Students *may* indicate this by (performance indicators):

- Relating case studies of damage to the hippocampus and its effect on memory
- Reporting on disorders, such as Alzheimer's and stroke, that can impair memory

CONTENT STANDARD 5: Methods for improving memory

Students are able to (performance standards):

5.1 Identify factors that interfere with memory.

Students *may* indicate this by (performance indicators):

- Generating examples of interference that reduce academic performance
- Describing case studies that involve memory loss
- Exploring the controversy surrounding repressed memories related to child abuse
- Explaining cross-racial eyewitness identification

5.2 Develop strategies for improving memory based on our understanding of memory.

Students *may* indicate this by (performance indicators):

- Developing and describing mnemonic devices to help learn psychological concepts
- Listing specific suggestions to enhance deep processing of information and to minimize the effect of interference
- Describing how concepts such as massed versus distributed practice, overlearning, state and context dependence, and schemas might relate to studying

Standard Area: Thinking and Language

Content Standards

After concluding this unit, students understand:

1. **Basic elements comprising thought**
2. **Strategies and obstacles involved in problem solving and decision making**
3. **Structural features of language**
4. **Theories and developmental stages of language acquisition**
5. **Links between thinking and language**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Basic elements comprising thought

Students are able to (performance standards):

1.1 Define thinking as a mental process involved in the manipulation and understanding of information.

Students *may* indicate this by (performance indicators):

- Identifying mental images and verbal symbols as elements that comprise thinking
- Describing controversies related to the role of thinking in behavior

1.2 Recognize that information is classified into categories containing similar properties known as concepts.

Students may indicate this by (performance indicators):

- Describing the process of concept formation
- Analyzing a group of words, phrases, or images and identifying the unifying concept
- Discussing how researchers study concept formation

CONTENT STANDARD 2: Strategies and obstacles involved in problem solving and decision making

Students are able to (performance standards):

2.1 Identify problem solving as a directed and productive example of thinking.

Students *may* indicate this by (performance indicators):

- Describing the steps involved in the problem-solving process
- Providing examples of how algorithms, heuristics, and insight are used in problem solving

2.2 Explain the use of creative thinking in problem solving.

Students *may* indicate this by (performance indicators):

- Discussing how creative thinking strategies, such as divergent thinking, brainstorming, and restructuring, are used in problem solving
- Describing the effects of social factors on problem solving

2.3 Analyze the obstacles that inhibit problem solving and decision making.

Students *may* indicate this by (performance indicators):

- Providing examples of how mental set and functional fixedness prevent the solving of a problem
- Evaluating strategies and obstacles involved in a class problem-solving activity
- Providing examples of how framing, risk avoidance, and overconfidence can affect the making of decisions
- Discussing how beliefs and motives influence reasoning

CONTENT STANDARD 3: Structural features of language

Students are able to (performance standards):

3.1 Define language as symbols and sounds that convey meaning and facilitate communication.

Students *may* indicate this by (performance indicators):

- Defining the properties of meaningfulness, structure, and reference in language
- Demonstrating that language is not limited to sounds by using American Sign Language

3.2 **Recognize that language is organized in a hierarchical structure.**

Students may indicate this by (performance indicators):

- Identifying the basic unit of language as phonemes that are combined in meaningful strings known as morphemes
- Providing examples of how morphemes combine to form words, phrases, and sentences
- Describing the role of grammar in language systems

CONTENT STANDARD 4: **Theories and developmental stages of language acquisition**

Students are able to (performance standards):

4.1 **Discuss the effects of development on language acquisition.**

Students may indicate this by (performance indicators):

- Tracing the stages of language development from infancy to childhood
- Contrasting the language development of bilingual/trilingual children to the development of children who speak only one language
- Recognizing that a critical period for language acquisition exists by using examples, such as the isolated adolescent named Genie or the Wild Boy of Aveyron

4.2 **Evaluate the theories of language acquisition.**

Students may indicate this by (performance indicators):

- Comparing the views of Chomsky and Skinner on language development
- Describing current theories of language acquisition
- Discussing the effect of culture on language acquisition
- Debating the advantages and disadvantages of bilingual education

4.3 **Speculate on whether animals acquire and use language.**

Students may indicate this by (performance indicators):

- Describing the nature of communication in honeybees
- Relating conclusions drawn from early attempts to teach language to apes
- Discussing contemporary views on the extent to which apes use language

CONTENT STANDARD 5: **Links between thinking and language**

Students are able to (performance standards):

5.1 **Examine the influence of language on thought and behavior.**

Students may indicate this by (performance indicators):

- Evaluating Whorf's linguistic relativity theory that language determines or only influences thought
- Providing examples, such as how sexist language can influence thought processes
- Comparing differing cultural practices regarding expressions of respect or formal pronoun use

Standard Area: States of Consciousness

Content Standards

After concluding this unit, students understand:

1. **Characteristics of sleep and theories that explain why we sleep**
2. **Theories used to explain and interpret dreams**
3. **Basic phenomena and uses of hypnosis**
4. **Categories of psychoactive drugs and their effects**

Content Standards With Performance Standards and Suggested Performance Indicators

CONTENT STANDARD 1: Characteristics of sleep and theories that explain why we sleep

Students are able to (performance standards):

1.1 Describe the NREM-REM sleep cycle.

Students may indicate this by (performance indicators):

- Drawing and labeling a graph that shows the sleep cycle throughout the night
- Charting the differences between NREM and REM sleep

1.2 Compare theories that explain why we sleep.

Students may indicate this by (performance indicators):

- Comparing restorative theories with evolutionary theories
- Explaining the effects of sleep deprivation
- Evaluating evidence to support various theories

1.3 Assess types of sleep disorders.

Students may indicate this by (performance indicators):

- Providing possible solutions for insomnia
- Listing the symptoms of narcolepsy and sleep apnea

CONTENT STANDARD 2: Theories used to explain and interpret dreams

Students are able to (performance standards):

2.1 Demonstrate an understanding of individual differences in dream content and recall.

Students may indicate this by (performance indicators):

- Collecting and analyzing data about dream content and recall with an informal survey
- Exploring cross-cultural differences in the significance of dreams

2.2 Compare different theories about the use and meaning of dreams.

Students may indicate this by (performance indicators):

- Comparing different theories about the significance of dreams (e.g., activation-synthesis or Freudian theory)
- Analyzing dream content using a Freudian framework

CONTENT STANDARD 3: Basic phenomena and uses of hypnosis

Students are able to (performance standards):

3.1 Describe several hypnotic phenomena.

Students may indicate this by (performance indicators):

- Discussing why some people are better hypnotic subjects than others
- Explaining hypnotic induction, suggestibility, and amnesia
- Explaining the relationship of healing practices that use trance induction and altered states of consciousness to hypnosis

3.2 Explain possible uses of hypnosis in psychology.

Students may indicate this by (performance indicators):

- Describing early uses of hypnosis to address psychological symptoms
- Evaluating the accuracy of memories recovered by hypnosis
- Identifying the uses of hypnosis in pain control and psychotherapy

CONTENT STANDARD 4: Categories of psychoactive drugs and their effects

Students are able to (performance standards):

4.1 Characterize the major categories of psychoactive drugs and their effects.

Students may indicate this by (performance indicators):

- Charting the names, sources, and uses of narcotic, depressant, stimulant, and hallucinogenic drugs
- Classifying drugs, such as tobacco, alcohol, and marijuana, with which students are most likely to have contact
- Discussing cultural and historical influences on making value judgments

4.2 Evaluate the effects of narcotic, depressant, stimulant, and hallucinogenic drugs.

Students may indicate this by (performance indicators):

- Identifying the potential for physiological and psychological dependence
- Describing the short-term behavioral, physiological, and cognitive effects
- Identifying the neurochemical mechanisms of drugs, such as nicotine or cocaine

SOCIOCULTURAL
DOMAIN

Standard Area: Individual Differences

Content Standards

After concluding this unit, students understand:

1. **Concepts related to measurement of individual differences**
2. **Influence and interaction of heredity and environment on individual differences**
3. **Nature of intelligence**
4. **Nature of intelligence testing**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: **Concepts related to measurement of individual differences**

Students are able to (performance standards):

1.1 **Define and understand the nature of test constructs, such as intelligence, creativity, and personality.**

Students *may* indicate this by (performance indicators):

- Recounting early attempts to measure human characteristics and develop tests
- Comparing and contrasting personality characteristics of two persons

1.2 **Describe basic statistical concepts in testing**

Students *may* indicate this by (performance indicators):

- Describing how test validity and reliability are established and related
- Determining which of two tests would be more useful for a particular purpose when given relevant data about validity and reliability

CONTENT STANDARD 2: **Influence and interaction of heredity and environment on individual differences**

Students are able to (performance standards):

2.1 **Explain how personality and intelligence may be influenced by heredity and environment.**

Students *may* indicate this by (performance indicators):

- Citing one or more studies demonstrating how environmental variables influence the development of intellectual skills
- Characterizing how studies of identical versus fraternal twins help establish the role of heredity in determining individual differences in intelligence
- Predicting which of two correlations will be higher: the correlation between the IQs of identical twins or the correlation between the IQs of fraternal twins
- Describing how the interaction between children and parents relates to differences in motivation and personality
- Explaining the role of cultural and group norms in establishing the frames of reference we use in thinking about individual differences
- Describing the link between intelligence testing and the eugenics movement

CONTENT STANDARD 3: **Nature of intelligence**

Students are able to (performance standards):

3.1 **Link intelligence to the use of cognitive skills and strategies.**

Students *may* indicate this by (performance indicators):

- Explaining how cognitive processes, such as analogical reasoning and speed of processing, are involved in intelligence
- Discussing the role of planning and self-regulation in intelligence
- Contrasting the skills that people typically acquire in school with those that people acquire outside of school and discussing the skills most likely to be related to scores on intelligence tests
- Describing how intelligence test scores are derived
- Discussing the relationship between intelligence and musical, artistic, and other special abilities

3.2 Describe how intelligence changes over time.

Students may indicate this by (performance indicators):

- Explaining why children's capacity for intelligent behavior increases as they get older
- Explaining how practice and effort increase intelligence
- Explaining why education increases intelligence

3.3 Describe theories of intelligence.

Students may indicate this by (performance indicators):

- Comparing traditional psychometric theories of intelligence to more recent approaches (e.g., Gardner's multiple intelligences, Sternberg's triarchic theory, theory of emotional intelligence)
- Debating whether intelligence is one or several abilities
- Describing emotional intelligence

CONTENT STANDARD 4: Nature of intelligence testing

Students are able to (performance standards):

4.1 Discuss how intelligence tests reflect differences among people.

Students may demonstrate this by:

- Describing what has changed and what has stayed the same if a child has the same intelligence test score in the ninth grade as in the first grade
- Explaining what would probably happen to the intelligence test score of a person who dropped out of school after the sixth grade
- Explaining the meaning of culture fair testing

4.2 Explain why intelligence tests predict achievement.

Students may indicate this by (performance indicators):

- Citing correlations between IQ and academic achievement and explaining the correlation
- Predicting how intelligence test scores correlate with other measurable variables (e.g., grades, supervisor ratings, etc.)
- Explaining why intelligence tests and other aptitude tests correlate with ability to do a job, but tests of motivation and personality increase the ability to predict how well individuals will actually perform
- Exploring how ethnicity and gender can moderate achievement predictions based on intelligence tests

4.3 Explain the limitations of using conventional intelligence tests.

Students may indicate this by (performance indicators):

- Describing the abilities commonly measured by intelligence tests
- Describing other skills that may be included on tests of intelligence in other cultures
- Identifying specific examples in which conventional tests will not produce valid uses
- Discussing the risks involved in using tests outside of the cultural domain in which they were developed
- Identifying specific examples in which conventional tests will not produce valid results
- Exploring the consequences of using labels derived from testing, such as "genius," "normal," or "mentally/cognitively challenged"
- Discussing how test scores are used in college admissions

Standard Area: Personality and Assessment

Content Standards

After concluding this unit, students understand:

1. **What is meant by personality and personality constructs**
2. **Personality approaches and theories**
3. **Assessment tools used in personality**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: What is meant by personality and personality constructs

Students are able to (performance standards):

1.1 Define personality as the individual's unique way of thinking, feeling, and acting.

Students *may* indicate this by (performance indicators):

- Identifying their own thoughts, feelings, and behavior in a personal experience
- Describing how personality can explain individual differences and individual consistencies
- Evaluating the influence of variables such as culture, family, and genetics on personality development
- Exploring the impact of sociocultural factors on personality development, including ethnicity, gender, sexual orientation, ability/disability, and so on

1.2 Explain the role of personality constructs as a framework for organizing behavioral phenomena.

Students *may* indicate this by (performance indicators):

- Describing a historical example of personality explanations
- Differentiating the situational basis for personality versus enduring aspects of personality
- Identifying their personal constructs for explaining behavioral phenomena
- Describing how personality constructs can guide research
- Speculating on the difficulties personality researchers have studying personality
- Discussing how bicultural and multicultural individuals may express different personality dimensions (e.g., "code-switching") depending on the cultural context

CONTENT STANDARD 2: Personality approaches and theories

Students are able to (performance standards):

2.1 Explain the characteristics of the psychoanalytic, cognitive-behavioral, humanistic, and trait approaches.

Students *may* indicate this by (performance indicators):

- Comparing how different personality approaches address the influence of free will and determinism
- Analyzing how each approach would assess a case history

2.2 Identify important contributions to the understanding of personality.

Students *may* indicate this by (performance indicators):

- Diagramming Freud's structure of personality and describing his role in initiating study in the area of personality
- Describing the influence of external stimuli, modeling, and situational context on behavior
- Exploring the significance of self-perception and needs on an individual's thoughts, feelings, and actions
- Classifying primary dimensions, such as emotional stability or extraversion, as a way to organize behavioral phenomena

CONTENT STANDARD 3: Assessment tools used in personality

Students are able to (performance standards):

3.1 Distinguish between objective and projective techniques of personality assessment.

Students *may* indicate this by (performance indicators):

- Naming popularly used objective and projective tests
- Comparing and contrasting the validity and reliability of objective and projective assessment techniques

3.2 Describe tests used in personality assessment.

Students may indicate this by (performance indicators):

- Explaining key features of tests, such as the Minnesota Multiphasic Personality Inventory (MMPI-2) and the Thematic Apperception Test (TAT)
- Identifying the possible applications of personality assessment

Standard Area: Psychological Disorders

Content Standards

After concluding this unit, students understand:

1. **Characteristics and origins of abnormal behavior**
2. **Methods used in exploring abnormal behavior**
3. **Major categories of abnormal behavior**
4. **Impact of mental disorders**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Characteristics and origins of abnormal behavior

Students are able to (performance standards):

1.1 Distinguish the common characteristics of abnormal behavior.

Students *may* indicate this by (performance indicators):

- Listing criteria that distinguish normal from disordered behavior
- Identifying patterns of behavior that constitute abnormality
- Describing how some abnormal behaviors may be designated as abnormal only in particular historical or cultural contexts

1.2 Cite examples of abnormal behavior.

Students *may* indicate this by (performance indicators):

- Describing observable symptoms of abnormal behavior
- Distinguishing disorders on the basis of severity of interference with functioning, such as psychotic versus nonpsychotic disorders

1.3 Relate judgments of abnormality to contexts in which those judgments occur.

Students *may* indicate this by (performance indicators):

- Recognizing the influence of context in designating abnormal behavior
- Identifying how judgments about abnormality have changed through history (e.g., homosexuality or epilepsy)
- Describing some abnormal behaviors specific to particular contexts or circumstances
- Acknowledging sociocultural implications of labeling behavior as abnormal
- Citing examples of misdiagnosis that may result from evaluator ignorance of relevant cultural and situational norms for behavior

1.4 Describe major explanations for the origins of abnormality.

Students *may* indicate this by (performance indicators):

- Describing biological approaches as explaining disorders arising from physiological sources
- Characterizing psychological approaches as explaining disorders derived from psychological sources, such as emotional turmoil, distorted thinking, and learning
- Identifying sociocultural approaches as explaining how sociocultural factors, such as class, influence diagnosis
- Defending spiritually based explanations for abnormal behavior (e.g., soul loss, transgression against ancestor)
- Recognizing that a label, such as schizophrenia, does not explain, but only describes abnormal behavior patterns
- Exploring the long-term impact of diagnostic labels even after successful treatment

CONTENT STANDARD 2: Methods used in exploring abnormal behavior

Students are able to (performance standards):

2.1 Identify the purpose of different research methods.

Students *may* indicate this by (performance indicators):

- Describing methods used in research on abnormal behavior, such as case studies, experiments, and surveys
- Justifying the use of one method over another to answer a specific research question
- Discussing how animal models of abnormality offer insight into human problems

2.2 Characterize the advantages and limitations of different research methods for studying abnormal behavior.

Students may indicate this by (performance indicators):

- Evaluating the quality of research conclusions derived in a specific study
- Speculating about the preferred method for answering a specific research question
- Discussing validity of findings of research methods with different cultural groups

CONTENT STANDARD 3: Major categories of abnormal behavior

Students are able to (performance standards):

3.1 Discuss major categories of abnormal behavior.

Students may indicate this by (performance indicators):

- Explaining selected categories of abnormal behavior, such as anxiety disorders, mood disorders, substance abuse disorders, and schizophrenia
- Identifying symptoms of selected categories of disorders

3.2 Explore the challenges associated with accurate diagnosis.

Students may indicate this by (performance indicators):

- Examining the influence of class, gender, ethnic, or age bias on diagnosis
- Explaining how psychologists with different orientations produce different diagnostic conclusions about the same case example
- Exploring how definitions of abnormality differ over time and across cultures

CONTENT STANDARD 4: Impact of mental disorders

Students are able to (performance standards):

4.1 Consider factors that influence vulnerability to abnormal behavior.

Students may indicate this by (performance indicators):

- Exploring how sociocultural factors influence vulnerability to abnormal behavior
- Describing the role of heredity as it influences risk for abnormal behavior

4.2 Discuss the stigma associated with abnormal behavior.

Students may indicate this by (performance indicators):

- Citing historic or fictional examples of stigmatized behavior
- Speculating about how abnormal conditions might influence acceptance in contemporary life

4.3 Speculate about means for promoting greater understanding of abnormal behavior.

Students may indicate this by (performance indicators):

- Describing historic efforts to promote tolerance of those stigmatized by mental disorder
- Developing a strategy to promote support for individuals with specific mental disorders

Standard Area: Treatment of Psychological Disorders

Content Standards

After concluding this unit, students understand:

1. **Prominent methods used to treat people with disorders**
2. **Types of practitioners who implement treatment**
3. **Legal and ethical challenges involved in delivery of treatment**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Prominent methods used to treat people with disorders

Students are able to (performance standards):

1.1 Describe availability and appropriateness of various modes of treatment for people with psychological disorders.

Students *may* indicate this by (performance indicators):

- Identifying major treatment orientations used in therapy, such as behavioral, cognitive, psychoanalytic, humanistic, feminist, and biomedical
- Distinguishing psychotherapy from medical intervention and spiritual support
- Describing different treatment formats, such as individual, couples, group, systems
- Explaining how different treatment orientations will influence the therapy plan
- Discussing how theoretical orientations may promote specific treatment biases

1.2 Describe characteristics of effective treatment and prevention.

Students *may* indicate this by (performance indicators):

- Characterizing early attempts to reduce psychological symptoms and speculate about their likelihood of success
- Discussing credibility of treatment based upon cultural explanations or beliefs about abnormality or causation of illness
- Speculating about factors that prompt ethnic minority group members to stay or leave treatment (sometimes characterized as "premature termination") provided in state or county mental health facilities
- Identifying criteria for evaluating successful treatment
- Discussing validity of findings of research methods with different cultural groups
- Citing evidence for success of a treatment intervention
- Describing prevention strategies that build resilience and promote competence

CONTENT STANDARD 2: Types of practitioners who implement treatment

Students are able to (performance standards):

2.1 Identify therapists according to training.

Students *may* indicate this by (performance indicators):

- Differentiating various types of intervention specialists: psychologist versus psychiatrist versus counselor versus social worker
- Arguing about the advantages and disadvantages of different types of practitioners
- Exploring how credibility of treatment professionals or healers varies among diverse groups of people

2.2 Describing strategies for locating appropriate therapists.

Students *may* indicate this by (performance indicators):

- Locating care providers through established systems, such as local mental health associations, hospitals, and mental health clinics
- Incorporating the idea of matching the presenting problem to the orientation and expertise of the care provider
- Speculating about why disenfranchised group members might mistrust mental health professionals in traditional settings
- Discussing validity of findings of research methods with different cultural groups

CONTENT STANDARD 3: Legal and ethical challenges involved in delivery of treatment

Students are able to (performance standards):

3.1 Describe the intersection between mental health and law.

Students *may* indicate this by (performance indicators):

- identifying conflicts between individual rights and rights of society, as illustrated by deinstitutionalization and commitment proceedings
- Distinguishing "competent to stand trial" versus "legally insane" status
- Identifying historic or fictional examples involving mental health judgments in legal settings

3.2 Examine the influence of law on the practice of psychotherapy.

Students *may* indicate this by (performance indicators):

- Identifying the therapist's ethical obligation to practice competently
- Describing how confidentiality regulations protect client privacy
- Explaining right to treatment as well as right to refuse treatment

Standard Area: Social and Cultural Dimensions of Behavior

Content Standards

After concluding this unit, students understand:

1. **Social judgment and attitudes**
2. **Social and cultural categories**
3. **Group processes**
4. **Social influence**

Content Standards With Performance Standards and *Suggested* Performance Indicators

CONTENT STANDARD 1: Social judgment and attitudes

Students are able to (performance standards):

1.1 Demonstrate an understanding of person perception.

Students *may* indicate this by (performance indicators):

- Explaining the role of social schemas in person perception
- Stating how different kinds of physical attractiveness can influence perceptions of other personal characteristics
- Describing how cultural socialization determines social schema development

1.2 Describe how attributions affect our explanations of behavior.

Students *may* indicate this by (performance indicators):

- Explaining differences between internal and external attributions
- Drawing conclusions about the effect of actor–observer bias and the formation of fundamental attribution errors

1.3 Identify sources of attitude formation.

Students *may* indicate this by (performance indicators):

- Providing learning-based interpretations of attitude formation
- Explaining the role of expectations and stereotyped thinking as they relate to attitude and behavior

1.4 Assess some methods used to change attitudes.

Students *may* indicate this by (performance indicators):

- Citing research on the effects of advertising and persuasion
- Speculating about the potential of media to influence positive attitude change
- Creating campaigns to produce social change and evaluate their effectiveness

CONTENT STANDARD 2: Social and cultural categories

Students are able to (performance standards):

2.1 Identify basic social and cultural categories.

Students *may* indicate this by (performance indicators):

- Identifying major social categories in the U.S. culture (e.g., gender, race, ethnicity, sexual orientation, and disability)
- Describing the components of culture (e.g., symbols, language, norms, and values)
- Differentiating between culture and society or social structure

2.2 Discuss how social and cultural categories affect behavior.

Students *may* indicate this by (performance indicators):

- Explaining how U.S. culture is both similar to and different from culture in other countries
- Discussing how the meanings of social categories (e.g., gender and age) can change over time and differ across cultures
- Speculating about how lives would change if magically transformed into a different social category (e.g., opposite gender)

CONTENT STANDARD 3: Group processes

Students are able to (performance standards):

3.1 Describe effects of the presence of others on individual behavior.

Students may indicate this by (performance indicators):

- Applying the notion behind social facilitation to performance at a track meet
- Providing an example of the bystander effect
- Distinguishing differences in social behavior among individuals relative to their exercise of power (e.g., persons with less power may show greater awareness of persons with more power)

3.2 Describe how social structure can affect intergroup relations.

Students may indicate this by (performance indicators):

- Discussing conflict and the processes involved in conflict resolution
- Describing the Robber's Cave study and explaining its implications
- Giving examples of creating social structures that would foster competition between groups
- Graphing the expected productivity level of an American business in which people work individually compared to those doing the same kind of work in-group
- Providing positive and negative outcomes of group polarization
- Giving examples of how a superordinate goal can increase cooperation between groups

3.3 Explore the nature of bias and discrimination.

Students may indicate this by (performance indicators):

- Describing situations in which bias occurs
- Examining how bias and discrimination influence behavior
- Describing examples from early research on prejudice and discrimination
- Relating a personal example of ethnocentrism
- Exploring the nature of in-group/out-group dynamics
- Speculating on the sources of opposition to the 1954 Supreme Court's decision regarding Brown vs. Board of Education of Topeka
- Predicting how the self-fulfilling prophecy can fuel stereotypes about ethnic groups
- Developing strategies for promoting tolerance, cooperation, and equality

CONTENT STANDARD 4: Social influence

Students are able to (performance standards):

4.1 Describe circumstances under which conformity and obedience are likely to occur.

Students may indicate this by (performance indicators):

- Explaining the importance of group size as a predictor of conformity
- Discussing why obedience to authority is a common phenomenon
- Citing examples of disobedience to authority
- Analyzing the 1986 space shuttle disaster from the perspective of the groupthink hypothesis

4.2 Discuss the nature of altruism in society.

Students may indicate this by (performance indicators):

- Delineating the arguments for and against the labeling of a given human behavior as altruistic
- Debating whether specific actions qualify as altruistic
- Discussing the factors that increase or decrease altruism

4.3 Discuss the significance of aggression.

Students may indicate this by (performance indicators):

- Explaining aggression from several theoretical orientations (e.g., biomedical, psychoanalytic, and social-learning perspectives)
- Debating whether media can influence aggressive acts

PART III:
IMPLEMENTATION ISSUES

Suggested Scope and Sequence for a High School Psychology Course

A one-semester course does not provide sufficient time to teach units (standard areas) that enable students to achieve all of the standards. A year-long course ordinarily provides enough time to teach units in all of the standard areas only if the instructor chooses breadth over depth. This section provides some sample course outlines for 5-unit to 10-unit courses of study. A teacher might choose one or another outline on the basis of any of several factors.

For example, instructors may choose outlines that put the areas with which they are most comfortable earlier than other areas. Alternatively, the choice may be made to time content areas to correspond with related current events (e.g., aligning the Social and Cultural Dimensions of Behavior unit to occur near an important election or the Lifespan Development lessons to occur shortly before graduation). An instructor whose students participate in a science fair may choose to emphasize units that seem most likely to generate ideas for research projects. A 5-unit semester course may be desirable when the teacher chooses depth over breadth, whereas a 10-unit semester course may be preferable if the teacher wants students to recognize the wide diversity of the field. Each of the outlines meets the recommendations outlined. Whatever choice the instructor makes, these outlines provide structure for a course that covers psychology at an appropriate level and with appropriate breadth.

Sample Outlines for a 5-Unit Semester

Unit	*Domain*
Introduction and Research Methods	Methods
Biological Bases of Behavior	Biopsychological
Memory	Cognitive
Lifespan Development	Developmental
Psychological Disorders or Social	Sociocultural

Sample Outlines for a 7-Unit Semester

Unit	*Domain*
Plan 1	
Introduction and Research Methods	Methods
Social and Cultural Dimensions of Behavior	Sociocultural
Psychological Disorders	Sociocultural
Therapy	Sociocultural
Biological Bases of Behavior	Biopsychological
Memory	Cognitive
Lifespan Development	Developmental
Plan 2	
Introduction and Research Methods	Methods
Lifespan Development	Developmental
Biological Bases of Behavior	Biopsychological
Sensation and Perception	Biopsychological
Memory	Cognitive
Psychological Disorders	Sociocultural
Therapy	Sociocultural

Sample Outlines for an 8-Unit Semester

Unit	*Domain*
Plan 1	
Introduction and Research Methods	Methods
Biological Bases of Behavior	Biopsychological
Learning	Cognitive
Memory	Cognitive
Lifespan Development	Developmental
Motivation and Emotion	Biopsychological
Social and Cultural Dimensions of Behavior	Sociocultural
Psychological Disorders	Sociocultural
Plan 2	
Introduction and Research Methods	Methods
Memory	Cognitive
Biological Bases of Behavior	Biopsychological
Sensation and Perception	Biopsychological
States of Consciousness	Cognitive
Lifespan Development	Developmental
Personality and Assessment	Sociocultural
Stress, Coping, and Health	Biopsychological
Plan 3	
Introduction and Research Methods	Methods
Lifespan Development	Developmental
Biological Bases of Behavior	Biopsychological
Learning	Cognitive
Memory	Cognitive
Individual Differences	Sociocultural
Psychological Disorders	Sociocultural
Treatment of Psychological Disorders	Sociocultural

Sample Outlines for a 10-Unit Course

Unit	Domain
Plan 1	
Introduction and Research Methods	Methods
Biological Bases of Behavior	Biopsychological
Learning	Cognitive
Memory	Cognitive
Lifespan Development	Developmental
Individual Differences	Sociocultural
Motivation and Emotion	Biopsychological
Psychology	Biopsychological
Stress, Coping, and Health	Sociocultural
Psychological Disorders	Sociocultural

Plan 2

Introduction and Research Methods	Methods
Lifespan Development	Developmental
Biological Bases of Behavior	Biopsychological
Sensation and Perception	Biopsychological
Learning	Cognitive
Memory	Cognitive
Personality and Assessment	Sociocultural
Individual Differences	Sociocultural
Psychological Disorders	Sociocultural
Treatment of Psychological Disorders	Sociocultural

Plan 3

Introduction and Research Methods	Methods
Social	Sociocultural
Learning	Cognitive
Memory	Cognitive
Biological Bases of Behavior	Biopsychological
Thinking and Language	Cognitive
States of Consciousness	Cognitive
Lifespan Development	Developmental
Motivation and Emotion	Biopsychological
Stress, Coping, and Health	Biopsychological

How To Use the Standards in Day-to-Day Lesson Plans

It may seem a difficult task, especially for the beginning teacher of psychology, to "translate" the standards presented in this document into day-to-day lesson plans. Fortunately, there are many resources available to help in this regard.

First, note that there are suggested performance indicators for every performance standard. These performance indicators may be used as a starting point for classroom activities or student assignments. They are only suggestions. Teachers will want to substitute and supplement freely as they develop their own courses and lesson plans.

Second, use materials provided with psychology textbooks. Most books have an extensive package of materials that can be used to teach content more effectively. Perhaps the most helpful of these materials is the instructor's manual, which generally contains background information for the concepts covered in the text, lecture ideas, and suggestions for activities, demonstrations, and assignments. The usefulness of this information may vary, and one way to help select the most valuable information is to use the instructor's manual in conjunction with these standards. Time is at a premium for most teachers, so the standards can be helpful in choosing what to emphasize. Ideally, the teacher can relate every class activity to these standards.

Third, many other resources can help build the standards into an effective course. Teachers of Psychology in Secondary Schools (TOPSS) has been especially active in publishing a series of unit plans designed to help instructors teach a scientifically based course. Each of these plans contains a suggested procedural outline, a content outline, activities, critical-thinking exercises, discussion questions, and a bibliography. Two of the already published units, *An Introduction to the Field of Psychology* and *Stat Pack*, are extremely helpful for developing the Introduction and Research Methods unit, which is the core of these standards. As they are developed, these unit plans are distributed free to TOPSS members. Previously published units are available for a nominal fee from the Education Directorate at APA.

Other print, computer, and video resources worth considering are included in the appendixes of this document. To teachers developing their first high school psychology course, the sheer volume of these resources can seem daunting. The best thing for a teacher to do is to start with the basic framework provided by the standards to determine which parts of the textbook will be taught. The teacher should join TOPSS to tap into a source of high quality curriculum materials (as well as a professional connection with other high school psychology teachers and a variety of student-oriented benefits, among other things). The teacher needs to explore other sources of information to continually refine and improve the psychology course. As long as the materials and activities used fit the standards suggested in this document, students will experience an accurate, high-quality introduction to the science of psychology.

This section contains a Lesson Planning Sheet to help connect your present teaching strategies and materials to the standards and to develop new lessons designed specifically to meet one or more performance standards. The format of the sheet makes it possible to integrate the standards quickly and efficiently into the curriculum in a practical, useful way.

To show how the Lesson Planning Sheet might be used, a blank planning sheet, and two sample lessons are included, along with the necessary supporting materials.

Lesson Planning Sheet (for day_____ of a _____ day unit)

Standard Area (Unit Name): _____

Domain:

Targeted Content Standard(s):

Targeted Performance Standard(s):

Performance Objective _____ . _____ : _____

Materials Needed:

Notes:

Lesson Planning Sheet (for day _____ of a _____ day unit)

Standard Area (Unit Name): **Stress, Coping, and Health**
Domain: Biopsychological

Targeted Content Standard(s):
CONTENT STANDARD 2: Physiological reactions to stress

Targeted Performance Standard(s):

Performance Objective 2.1: List and explain possible physiological reactions to stress

A. Teaching strategy to be used: Discussion of stress, its sources, and how it affects health (see attached notes)
B. Performance indicator (assessment technique): Stress/Biodot journal activity
C. Estimated time required: One period of class time and out-of-class assignment

Materials Needed:
Biodots, available from Biodot International. 1-800-272-2340
Student journal handout (attached)

Notes:

Stress Unit
Introductory Notes

Stress: The anxious or threatening feeling that comes when we interpret a situation as being more than our psychological resources can adequately handle (Lazarus 1990, 1993)

Eustress: Positive stress

Distress: Negative stress

The first step in experiencing stress involves interpretation or primary appraisal.

Primary Appraisal: Our initial, subjective evaluation of a situation in which we balance the environmental demands against our ability to meet them

Initial appraisal leads to one of three conclusions:

(1) The situation is irrelevant and will not affect us.
(2) The situation is positive and will benefit us.
(3) The situation is stressful and will lead to harm/loss, threat, or a challenge.

Harm/Loss: Elicits negative emotions (i.e., fear, depression, and anxiety)

Threat: Anticipation that a harmful situation will occur

Challenge: A potentially positive situation that may lead to gain or personal growth. We must mobilize physical energy and psychological resources to meet the situation.

Some appraisals can be a combination of the three stressful situations (i.e., a new job may be appraised as a threat and a challenge).

How does our appraisal affect stress levels? Research has shown that people who view the situation as stressful were significantly more aroused than those who had a challenge appraisal.

Physical Effects of Stress

(1) Stress Appraisal activates the hypothalamus, which then triggers the pituitary gland and sympathetic division of the autonomic nervous system.

- The pituitary gland releases adrenocorticotropic hormone (ACTH), which acts on part of the adrenal gland (adrenal cortex). Physical arousal occurs because the heart rate is increased, along with blood pressure and other responses.

(2) Heart rate increases. It can go from 70-90 beats per minute to 200-220 beats per minute (Sloan et al., 1994).

- Rapid heart rate increases blood flow to muscles and vital organs, such as the lungs and kidneys.

(3) Respiration becomes more rapid and shallow resulting in greater flow of oxygen into the body.

(4) The liver releases glycogen to provide energy during a stressful situation. After the stress, we may feel worn out because of a low supply of blood sugar.

- Stomach and intestinal activity is reduced by the sympathetic nervous system, which can cause stomach pain, constipation, or diarrhea.

(5) The pupils dilate and permit more light to enter the eye.

(6) Goosebumps (piloerections) may cause the hair to stand up. Triggered by the sympathetic nervous system, this reaction is more noticeable in cats and dogs.

(7) The adrenal glands have an inside part called the adrenal medulla and an outside called the adrenal cortex. The adrenal medulla is activated by the sympathetic system and secretes epinephrine (adrenaline). The result is an increase in heart rate, blood pressure, blood flow to muscles, and blood sugar, which is a source of energy.

- The pituitary gland causes the adrenal cortex to secrete hormones called corticosteroids, which regulate levels of minerals and glucose in the body.

(8) Tightness in your muscles occurs during periods of stress, enabling you to move and be coordinated. An extended period of stress can result in sore muscles.

Stress/Biodot Journal Entry

For this journal entry, you will wear your biodot throughout the day. You must be careful to keep an eye on it because it can easily be "bumped" off. If you lose yours, you can still complete your assignment.

From the moment you wake up, keep a log documenting any stressful events that you experience throughout the day. In addition to recording the stressor, write down how you reacted physically, emotionally, and behaviorally. By the day's end, you should have an idea of how you deal with stress. Your biodot should change color based on your body temperature. See if you notice a correlation between your stressful events and the color of the biodot. Close your journal entry with a paragraph that summarizes how much stress you experienced during the day and how effective your coping mechanisms were.

Below is an example of how you can set up your entry:

Stressful Event	Bodily Reaction	Emotional Reaction	Behavioral Reaction

Lesson Planning Sheet (for day _____ of a _____ day unit)

Standard Area (Unit Name): **Lifespan Development**
Domain: Developmental

Targeted Content Standard(s):

Content Standard 1: Development as a lifelong process
Content Standard 3: Stage theories of development

Targeted Performance Standard(s):

Performance Objective 1.3: Identify the complex cognitive structures found in the early development of infants and young children.

Performance Objective 3.1: Outline the stages of a developmental theory by theorists such as Piaget, Erickson, Kohlberg, Gillian, Cross, Helms, and so on.

A. Teaching strategy to be used: Reading appropriate sections of the text; class discussion followed by demonstrations and experiments conducted with young children
B. Performance indicator (assessment technique): Completion of a written or oral group report
C. Estimated time required: Two class periods for preparation, one class period to conduct the demonstrations and experiments, out-of-class time to prepare reports

Materials Needed:

Permission letters for parents volunteering child participants (attached)
Suggestions for experiments and demonstrations (some possibilities attached)
Materials for experiments and demonstrations
Student report guidelines (attached)

Notes:

SAMPLE

Date

Dear Parents:

The psychology classes at Hobart are studying child development. This topic covers patterns of development in physical growth, motor coordination, intellectual ability, language, moral reasoning, and emotional growth.

The students would like to bring young children (toddler through preschool) to class for 1 hour next week to test them over the various areas covered in their text. Activities are being planned that will measure different areas of development.

Monday, December 18, is the day we have chosen for this activity. The classes meet at the following times:

1st hour - 7:30 am - 8:20 am
3rd hour - 9:20 am - 10:10 am
4th hour - 10:15 am - 11:05 am
6th hour - 12:45 p.m. - 1:35 p.m.
7th hour - 1:40 p.m. - 2:30 p.m.

Arrangements should be made for the children to be brought to the school's main lobby at the appropriate time. Also, they should be picked up when the class is over. No children should be at the high school for longer than the prearranged class period.

You are welcome to attend. I am confident that the students will be well organized and that it will be an enjoyable experience for all.

Please sign the permission slip at the bottom of this letter if you agree to allow your child to participate in this activity.

Thank you.

Mrs. Barbara Loverich

My child, _____ , is allowed to participate in the development experiments at Hobart High School on Monday, December 18.

_____

Parent/Guardian Signature

Recreation of Piaget's Sensory Data Experiments

To be used during in-class experiments:

Materials for #1:

1. (2) different sized beakers
2. Colored water in each beaker
3. (2) Butter knives

Procedures for #1:

1. Put a knife in each beaker.
2. View the knife from the side of each glass. "How does it appear?" (Bent)
   "We are able to tell that the knife is not actually bent at what age?" (10–12)

Materials for #2:

1. (1) Container for beads
2. (20) Brown wooden beads
3. (2) White wooden beads

Procedures for #2:

1. Place all beads in the container.
2. Have child observe beads in the container. "Do you agree that all the beads are wooden: 20 are brown and 2 are white?" Then ask, "Are there more wooden beads or more brown beads?"
   (Children know inclusion at about age 8.)

Materials for #3:

1. Several colored pieces of paper

Procedures for #3:

1. Cut several shapes from each color (2 or 3 stars, squares, circles, etc. of each color).
2. Give child several cutouts. Have child match the colors that go together, then divide each color group into subgroups by shape.
   (Concrete operational children can do this; preperational children cannot).

Scientific Report
Child Development Unit

ONE report may be turned in for each group. It should be approximately two typed pages. Include the following:

ONE COVER PAGE—This should contain the names of all members of the group, a title, your class hour, and the date.

HYPOTHESIS—For every experiment, each person should have one hypothesis written in the "If ... then..." format.

ONE METHOD—You need to write this information only one time in your report.

APPARATUS—Each person should list exactly what equipment was used for the experiment.

PROCEDURE—A step-by-step explanation should be given of how you performed your experiment. Use the exact words that you said to the child.

RESULTS—Each person will have a different results section, in which he/she reports the child's responses.

DISCUSSION—You may combine all of the results from each member of the group and discuss the performance of the subject. Example: The 4-year-old child was advanced in motor skills but behind in use of language.

VISUAL—At the end of each report, include a section for the visuals. Make sure that your name is on the visual, so that I can include it as part of your grade.

POINTS FOR WRITTEN REPORT: 75 points

TITLE PAGE: 5
HYPOTHESIS: 10
METHOD: 5
APPARATUS: 5
PROCEDURE: 15
RESULTS: 15
DISCUSSION: 15
VISUAL: 5

POINTS FOR ORAL REPORT: 25 points
Each person should choose one experiment. Give the hypothesis, explain the results, show a visual (or play tape). Someone in the group should explain information about the participant before the experiments are given.

Psychology Teacher Certification in Secondary Schools

Teacher certification in psychology should be addressed by each school district in which psychology is taught. The first step for each district is to determine whether or not present teachers of psychology meet the certification requirements for its state board of education.

A survey of certification requirements for psychology teachers reveals a wide variation from state to state. Some states have no specific requirements, and others require a degree in psychology. The purpose of this document is not to supersede previous state board of education mandates. Rather, it is intended to serve as a guide for:

- Teachers and future teachers who are trying to determine whether they have the recommended background in the discipline necessary to teach a scientific psychology course
- School districts preparing to offer their first psychology courses
- School districts seeking to provide germane in-service opportunities for their experienced psychology teachers

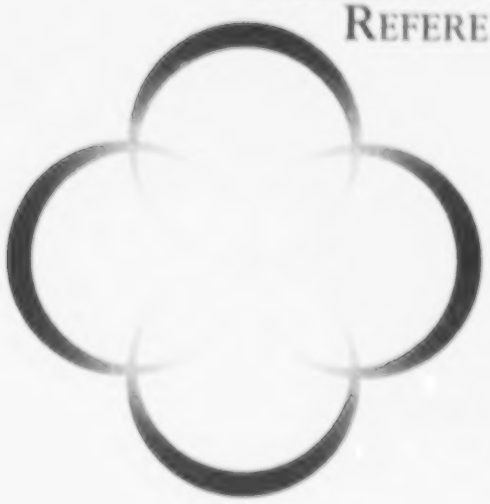
To function adequately in a scientific psychology course, teachers should have background in or seek to enrich their understanding of content areas typically covered in such a course. Undergraduate or graduate level course work will help teachers achieve:

- Proficiency in the scientific method and research skills
- Increased understanding of social–emotional issues
- Increased sensitivity to social–emotional issues
- Expertise in biologically based behavioral phenomena
- Familiarity with cognitive components of behavior
- Knowledge of developmental processes

Many teachers may be deficient in one or more of the domains listed above. Teachers underprepared in these areas should take college courses aimed at eliminating the particular deficiency, or enroll in one of the many psychology teacher summer workshops held throughout the country. For more information about these summer workshops, contact the Education Directorate of the American Psychological Association at: 750 First Street, NE, Washington, DC, 20002-4242, (202) 336-5500.

The ever-changing nature of psychology requires continuing education for all high school psychology teachers.

Part IV: References



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Part V: Resources

Recommended Popular Books on Psychology

Many psychology teachers consider the following to be interesting and readable books that say something worthwhile about psychology. All of these books are generally available in bookstores and libraries; many are available in paperback.

The list does not exhaust all possible print resources. It includes classic and contemporary work in scientific and applied areas. The list was derived from Charles Morris's and John Santrock's recommended readings. Paul Smith organized the books by their relevance to the five domains proposed in the standards. Some are listed in more than one domain.

Methods Domain

Brannigan, G. G., & Marrens, M. R. (1993). *The undaunted psychologist: Adventures in research*. New York: McGraw-Hill.
The Undaunted Psychologist contains fascinating stories from 15 research psychologists, describing what psychological research is really like—how they got their ideas, how they pursued them, and the successes and failures along the way. It conveys the excitement, challenge, and frustrations of psychological research. An excellent complement to any introductory textbook.

Elms, A. C. (1994). *Uncovering lives: The uneasy alliance of biography and psychology*. New York: Oxford University Press.
This is a discussion of the controversial field of psychobiography. Includes intriguing case histories of Freud, Jung, Skinner, Isaac Asimov, Jimmy Carter, George Bush, and Saddam Hussein.

Guthrie, R. V. (1994). *Even the rat was white: A historical view of psychology*. New York: Harper & Row.
Guthrie suggests that psychology has systematically excluded important sociocultural factors and recommends ways to build a more inclusive science.

Halpern, D. F. (1989). *Thought and knowledge: An introduction to critical thinking* (2nd ed.). Hillsdale, NJ: Erlbaum.
An outstanding (although challenging) application of psychological principles to critical thinking, memory, thought and language, analysis, probability, decision making, problem solving, and creative thinking. Includes hundreds of exercises and suggested readings.

Herek, G. M., Kimmel, D. C., Amaro, H., & Melton, G. B. (1991). Avoiding heterosexist bias in psychological research. *American Psychologist, 46*, 957-963.
An overview of the ways in which heterosexual bias permeates psychological research, with suggestions on how to avoid such bias in research as well as academic communities, more generally. Easy to understand and especially useful for students learning about how psychologists engage in the research process.

Hines, T. (1988). *Pseudoscience and the paranormal*. CA: Prometheus Press.
Hines analyzes why people believe in the supernatural despite all evidence to the contrary.

Huff, D. (1954). *How to lie with statistics*. New York: Norton.
This classic text explores how statistics can be used to manipulate and persuade, and it suggests ways to sharpen consumer skills.

Hunt, M. (1993). *The story of psychology*. New York: Anchor Books.
A highly readable story of attempts throughout history to understand the mind and ultimately the causes of behavior. Presents a wonderful overview of the history of psychology in the broadest sense.

Nye, R. D. (1992). *Three psychologies: Perspectives from Freud, Skinner, and Rogers* (4th ed.). Pacific Grove, CA: Brooks/Cole.
Nye gives a brief overview of the lives and basic concepts of these three influential theorists. His book includes comparisons, contrasts, and evaluations of the theories.

Scarborough, E., & Furumoto, L. (1987). *Untold lives: The first generation of American women psychologists*. New York: Columbia University Press.
The authors use historiographic methods to explore the lives of America's earliest women psychologists.

Stanovich, K. E. (1992). *How to think straight about psychology*. New York: Harper-Collins.
This insightful book examines how psychologists create and defend the validity of psychological arguments.

Sutherland, S. (1992). *Irrationality: Why we don't think straight*. New Brunswick, NJ: Rutgers University Press.
An engaging discussion of human irrationality in all its guises—obedience and conformity, ignoring and distorting evidence, mistakes, misinterpretations, foolish risk taking, intuition, and more.

Wade, C., & Tavris, C. (1993). *Critical and creative thinking: The case of love and war*. New York: HarperCollins.
Authors describe eight principles of critical thinking and then provide practice in applying those principles to understanding research on love (attraction, intimacy, conflict) and war (prejudice, aggression).

Woods, P. L., & Wilkinson, C.S. (1987). *Is psychology the major for you?* Washington, DC: American Psychological Association.
This is the book students need to help them decide about and prepare for a psychology career.

Biopsychological Domain

Ackerman, D. (1990). *A natural history of the senses*. New York: Random House.
Offers a compelling explanation about the evolution of different sensory systems.

Ackerman, D. (1994). *A natural history of love*. New York: Vintage.
What do Plato, Cleopatra, and the Indianapolis 500 race have in common? You'll find the answer to that and other interesting questions in this intriguing multidisciplinary overview of love written by a poet and naturalist.

Bailey, C. (1991). *The new fit or fat*. Boston: Houghton-Mifflin.
This text promotes better health through sensible nutrition and exercise.

Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. New York: McGraw-Hill.
One of the world's experts on the topic gives a thorough overview of what science tells us about aggression. Includes discussion of violence-prone personalities, domestic violence, gun control, violence in media, and control of aggression as well as various policy issues.

Bloom, F. E., Lazerson, A., & Hofstadter, L. (1988). *Brain, mind, and behavior* (2nd ed.). New York: Freeman.
A beautifully illustrated and highly readable account of advances in understanding of the relationship between the brain and behavior.

Campbell, A. (1993). *Men, women, and aggression*. New York: HarperCollins.
A readable discussion of the roots of aggression with emphasis on gender differences in aggression and ways of viewing aggression.

Coren, S. (1996). *Sleep thieves: An eye-opening exploration into the science and mysteries of sleep*. New York: Free Press.
A thorough explanation of sleep processes is explored in this text.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: HarperCollins.
Describes the psychology of happiness as obtained through "optimal experiences" or "flow states" in which deep enjoyment is experienced through focused concentration. Includes suggestions for controlling and creating flow states as well as many examples and case studies.

Cytowic, R. G. (1993). *The man who tasted shapes*. New York: Warner Books.
A collection of fascinating stories of synesthesia (experiencing colors as sounds, tastes as shapes, etc.). It includes discussion of how these strange phenomena might arise and draws implications for our understanding of reason, emotion, and perception.

Dement, W. C. (1976). *Some must watch while some must sleep: Exploring the world of sleep.* New York: Norton.
A brief overview of sleep, dreaming, and sleep disorders by an eminent researcher in the area.

Dennett, D. (1991). *Consciousness explained.* Boston: Little Brown.
The author explores how conscious experience can best be understood by drawing on psychology, neuroscience, philosophy, and artificial intelligence.

Eltenbeim, D. (Ed.). (1995). *Living with Prozac and other selective serotonin reuptake inhibitors (SSRIs): Personal accounts of life on antidepressants.* San Francisco: Harper.
Addresses what it's like to be on Prozac, Zoloft, and Paxil as told from the perspective of the patient. Includes material on the pros and cons of personality changes as well as other effects.

Gardner, H. (1973, 1994). *Art, mind, and brain: A cognitive approach to creativity.* New York: Basic Books.
The first of many fascinating books by an author called by the New York Times Book Review "one of America's most interesting psychologists." Gardner draws from and builds on Piaget's notions of cognitive development to provide insight into artistic development.

Gardner, H. (1985). *The mind's new science: A history of the cognitive revolution.* New York: Basic Books.
Gardner examines the history of the cognitive revolution in psychology and the nature of cognitive science today. He traces the roots to early thinkers, follows the thread through the 19th century and into the 20th century. He includes discussions of artificial intelligence, linguistics, anthropology, neuroscience, and shows the effect of the cognitive revolution on our understanding of perception, imagery, concept formation, and reasoning, among others.

Gregory, R. L. (1990). *Eye and brain: The psychology of seeing* (4th ed.). Princeton, NJ: Princeton University Press.
A wonderfully readable account of how we see, including lots of visual illusions.

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion.* New York: Cambridge University Press.
Explores how emotions of one person can affect the emotions of another—how it happens, why it happens, and the implications for understanding human behavior.

Hatfield, E., & Rapson, R. L. (1993). *Love, sex, and intimacy: Their psychology, biology, and history.* New York: HarperCollins.
An engaging, wide-ranging discussion of traditional romantic relationships, with many examples from literature and numerous case studies, along with cartoons, self-tests, and autobiographical material. Covers initial attraction, love, sex, intimacy, commitment, and power, as well as problems that often arise in romantic relationships along with suggestions for dealing with them. Also covers relationships that end in break up, divorce, or death, and the process of starting over.

Hilts, P. J. (1988). *Memory's ghost: The strange tale of* Mr. M. *and the nature of memory.* New York: Simon & Schuster.
Presents the fascinating case of Henry M., who underwent experimental brain surgery in 1953 and has since lived only in the present (technically, his hippocampus was removed and he lost episodic memory). He can talk, read, and write but has no memory for what has just happened—every minute is a new experience for him. The author uses this case effectively to discuss the nature of memory.

Hobson, J. A. (1994). *The chemistry of conscious states: How the brain changes its mind.* Boston: Little, Brown, & Co.
A highly readable account of the author's thesis that consciousness is nothing more or less than electrochemical events, that mind is brain. It discusses sleep and dreaming as well as memory, mental illness, and identity among other psychological phenomena.

Hunt, M. (1959, 1987, 1994). *The natural history of love* (Rev. ed.). New York: Anchor.
Classic best-seller, revised for the 1990's, examines love, sex, marriage, and male–female relationships throughout history.

Kohn, A. (1990). *The brighter side of human nature: Altruism and empathy in everyday life*. New York: Basic Books.
Author argues that it is natural for humans to be caring, generous, empathetic, altruistic, and kind rather than selfish, self-interested, and aggressive.

Konner, M. (1990). *Why the reckless survive...and other secrets of human nature*. New York: Penguin Books.
A physician/anthropologist offers intriguing essays on the biological aspects of human nature, in the process touching on creativity and mental illness, twin studies, the biology of mood, sexuality, and gender, among other topics.

Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
A comprehensive and readable discussion of the cognitive appraisal model of emotion and motivation by one of its most eminent researchers. Like many Oxford University Press books, this one is a bit more challenging than many other books on this list, but well worth the effort.

Lerner, H. G. (1989). *The dance of intimacy: A women's guide to courageous acts of change in key relationships*. New York: Harper & Row.
Focuses on achieving a healthy balance between "I" and "we" in close relationships.

Logue, A. W. (1991). *The psychology of eating and drinking*. New York: Freeman.
Provides an overview of food preferences, hunger and thirst, and eating and drinking disorders.

LeBerge, S., & Rheingold, H. (1990). *Exploring the world of lucid dreaming*. New York: Ballantine.
A step-by-step guide to lucid dreaming.

Myers, D. G. (1993). *The pursuit of happiness: Discovering the pathway to fulfillment, well-being, and enduring personal joy*. New York: Avon.
Presents a research-based discussion of what is known about human happiness and includes practical suggestions for increasing happiness.

Ornstein, R. (1991). *The evolution of consciousness: The origins of the way we think*. New York: Simon & Schuster.
Presents an entertaining and challenging discussion of the evolution of the mind, including fundamental questions about mind and how it works.

Restak, R. M. (1991). *The brain has a mind of its own*. New York: Crown Trade Paperbacks.
Presents a fascinating series of essays on the brain and mind, drugs, memory, consciousness, dreams, and emotion.

Restak, R. M. (1993). *Receptors*. New York: Bantam Books.
Presents a thorough and readable exploration of synapses and neurotransmitters and their links to drugs, moods, behavior, personality, and mental illness.

Sacks, O. (1970, 1985, 1992). *Migraine* (Rev. ed.). Berkeley, CA: University of California Press.
A best-selling book of case studies of people coping with various neurological disorders.

Sacks, O. (1970, 1985). *The man who mistook his wife for a hat and other clinical tales*. New York: HarperCollins.
A neurologist explores compelling case studies about consequences of organic brain damage.

Sacks, O. (1989). *Seeing voices: A journey into the world of the deaf*. New York: HarperCollins.
Presents a moving account of the world of the deaf.

Sacks, O. (1995). *An anthropologist on Mars: Seven paradoxical tales*. New York: Knopf.
Sack's sixth book on the theme of adaptation in the face of challenge or what he calls "the paradox of disease," in which neurological disorders call forth latent adaptive powers in human beings. He describes the lives of seven people who appear paradoxical—for example, Jonathan I (a colorblind painter), Carl Bennett (a surgeon racked by uncontrollable tics except when he is operating), and Stephen Wiltshire (an autistic artist).

Seligman, M. E. P. (1990). *Learned optimism*. New York: Pocket Books.
Focuses on optimism, pessimism, and positive thinking. Based on research and theory in cognitive psychology, author's position is that optimism and pessimism are learned explanatory styles and that these styles can be changed. Includes self-tests and practical advice.

Shepard, R. N. (1990). *Mind sights: Original visual illusions, ambiguities, and other anomalies, with a commentary on the play of mind in perception and art*. New York: Freeman.
Original drawings by this outstanding researcher are used to shed light on the relationship of mind (cognition), perception, and art. Includes a brief autobiography that is unusually entertaining.

Tavris, C. (1989). *Anger: The misunderstood emotion* (Rev. ed.). New York: Simon & Schuster.
This engaging, authoritative work covers all aspects of anger and includes recommendations for dealing with anger.

Tavris, C. (1992). *The mismeasure of woman*. New York: Touchstone.
Explores gender differences and examines stereotypes about women.

Toch, H. (1992). *Violent men: An inquiry into the psychology of violence* (Rev. ed.). Washington, DC: American Psychological Association.
Explores reasons why some men have a propensity for violence and engage in recurring violent behavior. Covers understanding and coping with violent people, including criminals, police officers, and rioters.

Walker, L. E. (1979). *The battered woman*. New York: Harper & Row.
An excellent self-help book for women experiencing emotional or physical abuse. Includes many moving case studies and discusses myths about and characteristics of battered women. Also explores the vicious circle that often keeps such women in abusive relationships and provides useful information about how to break out of such relationships.

Webb, W. B. (1992). *Sleep: The gentle tyrant* (2nd ed.). Boston: Anker.
A brief and highly readable overview of sleep, sleep disorders, dreams, drug effects on sleep, sleepwalking, and managing sleep problems.

Wright, R. (1995). *Moral animal: Why we are the way we are: The new science of evolutionary psychology*. New York: Vintage.
Examines various of aspects of human behavior from an evolutionary perspective.

Developmental Domain

Baron, N. (1992). *Growing up with language*. Reading, MA: Addison-Wesley.
Examines language development in children, and how to facilitate it.

Berzon, B. (1988). *Permanent partners*. New York: Plume.
Helps gay and lesbian couples improve their relationships.

Bolles, R. N. (1995). *The 1995 what color is your parachute? A practical manual for job hunters and career changers*. Berkeley, CA: Ten-Speed Press.
A best-selling annual self-help book on job hunting and career changes. Provides engaging and entertaining information and advice about finding a job, including an assessment of your own strengths and preferences. Also describes many additional sources of useful information.

Brazelton, T. B. (1987). *What every baby knows*. New York: Ballantine.
This highly regarded self-help book on parenting includes five in-depth family case studies in interview format.

Brazelton, T. B. (1989). *Toddlers and parents: A declaration of independence* (Rev. ed.). New York: Dell/Seymour Lawrence.
Like Brazelton's Infants and Mothers, this book provides lots of good examples and specific advice, this time for parents of toddlers (12-30 months of age).

Brazelton, T. B. (1992). *Touchpoints*. Reading, MA: Addison-Wesley.
This guidebook promotes understanding of child development from conception through the preschool years.

Comer, J. P., & Poussaint, A. F. (1992). *Raising Black children*. New York: Plume.
Two African American professors offer advice on improving the self-esteem and identity of Black children.

D'Augelli, A. R., & Patterson, C. J. (Eds.). (1995). *Lesbian, gay, and bisexual identities over the lifespan: Psychological perspectives*. New York, NY: Oxford University Press.
This book contains chapters that cover the full range of developmental issues for lesbian, gay, and bisexual people. Chapters include multicultural issues, biological and social constructionist views of development, couples and families, adolescents, midlife, aging, and community issues. The chapter on bisexual identities will be especially useful to those having difficulty finding material on this topic, although bisexuality is addressed in many of the other chapters as well.

Dreikurs, R., & Soltz, V. (1964). *Children: The challenge*. New York: Plume.
A self-help book on disciplining children effectively. It describes dozens of discipline problems, illustrates how parents often respond inappropriately in those situations, and describes more effective ways of responding.

Doyle, J. (1991). *The male experience*. Dubuque, IA: Brown & Benchmark.
This comprehensive text covers a wide range of topics related to being male in contemporary society.

Dunn, J., & Plomin, R. (1990). *Separate lives: Why siblings are so different*. New York: Basic Books.
Explores the concept of "nonshared environments" that have a profound effect on people—environmental events that affect only certain individuals in a family and cause them to differ from others in the same family, often to a surprising degree. Includes a discussion of the practical implications of all this as well as many of examples from real-life biographies.

Eckler, J. F. (1993). *Step-by-step-parenting: A guide to successful living with a blended family*. Cincinnati, OH: Betterway Books.
Discusses stepparenting in "blended families" (with children from both marriages). Discusses issues that commonly arise in stepfamilies and techniques for dealing with them.

Elkind, D. (1984). *All grown up and no place to go: Teenagers in crisis*. Reading, MA: Addison-Wesley.
In this highly regarded book on adolescence, Elkind discusses the nature of adolescence and focuses especially on the pressure to grow up quickly that has characterized adolescence in the United States during the late 20th century.

Elkind, D. (1988). *The hurried child: Growing up too fast too soon* (Rev. ed.). Reading, MA: Addison-Wesley.
This bestselling, self-help book focuses on the pressure throughout our society for children to grow up too fast and too soon. Examines parental pressure for children to be "superkids," the heavy burdens sometimes placed on children when both parents work, and excessive achievement demands, among other things. Offers advice for alleviating these pressures.

Erikson, E. H. (1963, 1993). *Childhood and society*. New York: Norton.
This Pulitzer Prize-winning book examines the challenges of childhood from a psychoanalytic view.

Gilligan, C. (1982, 1993). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
A best-selling and highly influential attack on the biases that inhere in most traditional theories of human development.

Harkott, A., Klopp, K. (1992). *How to save the children*. New York: Simon & Schuster.
This resource guide addresses how volunteerism can help alleviate the damaging effect of poverty and neglect on America's children.

Hechinger, F. (1992). *Fateful choices*. New York: Hill & Wang.
The challenge of healthy and happy adolescence is the focus of this highly praised text, which stresses the connection between health and education.

Jackendoff, R. (1994). *Patterns in the mind: Language and human behavior*. New York: Basic Books.
Examines the structure of language and how children learn language; presents modern linguistics in light of the cognitive revolution.

Kagan, J. (1994). *Galen's prophecy: Temperament in human nature*. New York: Basic Books.
A highly readable account by an eminent psychologist about evidence for inborn temperament. Focuses on evidence that some children are born inhibited and others are born uninhibited, and the implications of this fact for understanding shyness and other aspects of adult personality.

Kaufman, B. N. (1994). *Son-rise: The miracle continues*. Tiburon, CA: H. J. Kramer.
A compendium of cases treated at The Optional Institute.

Lane, H. (1976). *The wild boy from Aveyron*. Cambridge, MA: Harvard University Press.
A scholarly account of a boy whose early life was spent in the wild forests of Aveyron in southern France in the late 1700s. He was eventually captured, institutionalized, then sent to Paris for study and display. This book is a fascinating account, which also looks at the question of why he stirred such intense interest and the implications of what was learned for the distinction between humans and other animals.

Levinson, D. J. (1978). *The seasons of a man's life*. New York: Ballantine.
This best seller describes the author's view of stages and in adult male development (does "midlife crisis" sound familiar?). Includes cases from Levinson's research program as well as from biographies and literature.

Levinson, D. J., & Levinson, J. D., (1996). *The seasons of a woman's life*. New York: Knopf.
This book complements Levinson's previous book The Seasons of a Man's Life, by offering a woman's perspective of adult development.

Litton, B. J. (1994). *Journey of the adopted self: A quest for wholeness*. New York: Basic Books.
The inner world of those adopted who struggle with their biological status. Written by a strong advocate for open adoptions and includes case studies as well as lists of support groups.

Rymer, R. (1993). *Genie*. New York: HarperCollins.
This powerful story discusses the tragedy of a neglected child who grew up without language or social stimulation.

Savin-Williams, R. C. (1990). *Gay and lesbian youth: Expressions of identity*. New York, NY: Hemisphere.
A good overview of issues youth face, based on research as well as personal stories. Especially useful for secondary and undergraduate teachers who are working with this age group.

Steinberg, L., & Levine, A. (1990). *You and your adolescent: A parent's guide for ages 10-20*. New York: HarperCollins.
This highly regarded self-help book on adolescence includes specific suggestions for effective parenting.

White, B. L. (1995). *The new first three years of life* (4th ed.). New York: Simon & Schuster.
This highly regarded self-help book for parents with young children provides outstanding advice in numerous areas.

Cognitive Domain

Adams, J. L. (1986). *Conceptual blockbusting: A guide to better ideas* (3rd ed.). Reading, MA: Addison-Wesley.
This best-selling guide focuses on breaking through blocks to creative thinking and problem-solving; includes exercises and practice problems.

Alkon, D. L. (1994). *Memory's voice: Deciphering the mind-brain code*. New York: HarperCollins.
A highly readable discussion of the biological roots of thinking, memory, and emotion with emphasis on memory. Contains the author's memoirs, which are used to explore the factors that influenced the direction of his scientific career.

Baddeley, A. (1990). *Human memory*. Boston: Allyn & Bacon.
The author extensively reviews memory research to create a model for how memory works.

Cartwright, R., & Lemberg, L. (1992). *Crisis dreaming: Using your dreams to solve your problems*. New York: HarperCollins.
An eminent sleep/dream researcher and an award-winning journalist describe how to use dreams to gain self-insight. The book covers dream processes, ways to capture or retrieve dream content, and ways to change the course of dreams while asleep! It also includes case studies of people in crisis and their dreams.

Covey, S. R. (1989). *The seven habits of highly effective people*. New York: Simon & Schuster.
This best-selling, humanistic self-help book focuses on the importance of quality in people's lives and in corporate life as well. The author describes seven specific habits or behaviors that he believes are central to personal effectiveness.

Csikszentmyhalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: HarperCollins.
Describes the psychology of happiness as obtained through "optimal experiences" or "flow states" in which deep enjoyment is experienced through focused concentration. Includes suggestions for controlling and creating flow states as well as many examples and case studies.

Gardner, H. (1973, 1994). *Art, mind, and brain: A cognitive approach to creativity*. New York: Basic Books.
The first of many fascinating books by an author called by the New York Times Book Review "one of America's most interesting psychologists." Here, Gardner draws from and builds on Piaget's notions of cognitive development to provide insight into artistic development.

Gardner, H. (1983, 1993). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
This pivotal book argues against the notion that intelligence is one general capacity and for the notion that intelligence is a range of relatively independent competencies. Gardner discusses those various competencies and draws implications for education. (See companion reader: Multiple Intelligences, below.)

Gardner, H. (1985). *The mind's new science: A history of the cognitive revolution*. New York: Basic Books.
Examines the history of the cognitive revolution in psychology and the nature of cognitive science today. Traces the roots to early thinkers, follows the thread through the 19th century and into the 20th century. Includes discussions of artificial intelligence, linguistics, anthropology, and neuroscience; shows effects of the cognitive revolution on our understanding of perception, imagery, concept formation, and reasoning, among others.

Gardner, H. (1993). *Multiple intelligences: The theory of practice*. New York: Basic Books.
Covers the practical implications for education of the theory of multiple intelligences.

Gardner, H. (1993). *Creating minds*. New York: Basic Books.
Applies the theory of multiple intelligences to understanding creativity in such people as Freud, Einstein, Picasso, Stravinsky, T. S. Eliot, Martha Graham, and Mahatma Gandhi.

Gardner, H. (1995). *Leading minds: An anatomy of leadership*. New York: Basic Books.
Applies cognitive psychology (in particular creativity) to understanding the minds of selected leaders and followers. Discusses Margaret Thatcher, George Marshall, Gandhi, Martin Luther King, Jr., Eleanor Roosevelt, and Margaret Mead, among others.

Gilovich, T. (1991). *How we know what isn't so: The fallibility of human reason in everyday life*. New York: Free Press.
This imaginative work examines cognitive factors that predispose humans to making bad judgments.

Grandin, T. (1995). *Thinking in pictures*. New York: Vintage.
This moving autobiographical account explores the life history of a woman with Aspergers syndrome, including well-developed artistic skills but limited social skills.

Halpern, D. F. (1989). *Thought and knowledge: An introduction to critical thinking* (2nd ed.). Hillsdale, NJ: Erlbaum.
An outstanding (though challenging) application of psychological principles to critical thinking, memory, thought and language, analysis, probability, decision making, problem solving, and creative thinking. Includes hundreds of exercises and suggested readings.

Jackendoff, R. (1994). *Patterns in the mind: Language and human behavior*. New York: Basic Books.
Examines the structure of language and how children learn language; presents modern linguistics in light of the cognitive revolution.

Kotre, J. (1995). *White gloves: How we create ourselves through memory*. New York: Free Press.
A psychologist writes engagingly about how autobiographical memory changes over time and, in the process, causes us to recreate our personal histories and even our sense of self-identity. Touches on how families create shared memories of past events, infantile amnesia, repression of memories, photographic memories, and memory for apparently trivial events in our lives.

Langer, E. J. (1989). *Mindfulness*. Reading, MA: Addison-Wesley.
Argues that mindsets and perceived limitations cause us to lose control over our lives and to do mindless things. Proposes mindfulness as an avenue into human reserves and human potential.

Langer, E. J. (1997). *The power of mindful learning*. New York: Addison-Wesley.
Offers a new way of learning in different contexts to promote curiosity and mindful attention.

Loftus, E., & Ketcham, K. (1991). *Witness for the defense: The accused, the eyewitness, and the expert who puts memory on trial*. New York: St. Martin's.
A lively, personal, and informative examination of eight cases that centered on disputed eyewitness identifications in light of what psychology has to tell us about human memory. Also explores the thorny and often personal issues raised by psychologists serving as expert witnesses in cases.

Loftus, E., & Ketcham, K. (1994). *The myth of repressed memory: False memories and allegations of sexual abuse*. New York: St. Martin's.
Presents an attack on the belief in "recovered memories," particularly repressed memories of alleged sexual abuse; author argues that they are mostly fabrications.

Martin, G., & Pear, J. (1992). *Behavior modification: What is it and how to do it* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.
Offers guidelines for modifying habits and behavior using learning strategies.

Minninger, J. (1984). *Total recall*. New York: Pocket Books.
This lively book offers tips on improving your memory, including study strategies.

Ofshe, R., & Watters, E. (1994). *Making monsters: False memories, psychotherapy, and sexual hysteria*. New York: Charles Scribner's Sons.
An indictment of "recovered memories," which the author argues are often false and fabricated.

Pryor, K. (1991). *Don't shoot the dog: How to improve yourself and others through behavioral training*. New York: Simon & Schuster.
Offers strategies for self-control and for managing other aspects of life using reinforcement.

Rothenberg, A. (1990). *Creativity and madness: New findings and old stereotypes*. Baltimore: Johns Hopkins University Press.
An interesting and thorough examination of the relationship between creativity and mental illness, including consideration of Sylvia Plath, August Strindberg, Emily Dickinson, Robert Penn Warren, John Cheever, Eugene O'Neal, and William Faulkner, among others.

Schaller, S. (1991). *A man without words*. Berkeley, CA: University of California Press.
A moving account of a 27-year-old man who is normal except that he has no idea of language, much less the ability to speak or write. The book sheds light on the role of language in thinking.

Skinner, B. F. (1948, 1976). *Walden two*. New York: Macmillan.
A classic novel about society run on behavioral principles. The 1976 edition includes a retrospective commentary by Skinner almost 3 decades after the book first appeared.

Sutherland, S. (1992). *Irrationality: Why we don't think straight.* New Brunswick, NJ: Rutgers University Press.
An engaging discussion of human irrationality in all its guises—obedience and conformity, ignoring and distorting evidence, mistakes, misinterpretations, foolish risk taking, intuition, and more.

Terr, L. (1994). *Unchained memories: True stories of traumatic memories, lost and found.* New York: Basic Books.
A psychiatrist's gripping account of several cases in which people suddenly recalled traumatic events from their childhood, including one case in which the memories turned out to be false.

Wade, C., & Tavris, C. (1993). *Critical and creative thinking: The case of love and war.* New York: HarperCollins.
Describes eight principles of critical thinking and provides practice in applying those principles to understanding research on love (attraction, intimacy, conflict) and war (prejudice, aggression).

Wallace, D. B., & Gruber, H. E. (Eds.). (1989). *Creative people at work: Twelve cognitive case studies.* New York: Oxford University Press.
Provides accounts of a dozen highly creative people that underscore the uniqueness of each creative person. Among those discussed are Wordsworth, Faraday, Darwin, James, Einstein, Piaget, and Anais Nin.

Whitefield, C. L. (1995). *Memory and abuse: Remembering and healing the effects of trauma.* Deerfield Beach, FL: Health Communications.
Argues for of the existence "repressed" and "recovered memories."

Sociocultural Domain

Akeret, R. U. (1995). *Tales from a traveling couch.* New York: Norton.
Details what happened when a New York psychotherapist set out to find his most memorable patients and discover what has become of their lives.

Alberti, R. E., & Emmons, M. L. (1990). *Your perfect right: A guide to assertive living* (6th ed.). San Luis Obispo, CA: Impact.
This best-selling, self-help book has stood the test of time. Distinguishes assertiveness from aggressiveness and includes self-tests to determine your own assertiveness level, advice, and instructions for becoming more assertive, and recommendations for programs for training others to become more assertive.

Alcoholics Anonymous World Services.(1990). *Twelve steps and twelve traditions* (2nd ed.). New York: Author.
Contains a more detailed description of the Twelve Steps, testimonials from numerous AA members, and information about joining AA.

Allport, G. W. (1965). *Letters from Genie.* San Diego: Harcourt Brace Jovanovich.
Letters from Jenny Masterson to her son provide unique insight into her life and personality. A rich set of autobiographical materials that includes brief personality interpretations from existential, psychodynamic, and trait perspectives. This book is considered a classic.

Aronson, E. (1995). *The social animal* (7th ed.). New York: Freeman.
This beautifully written and entertaining introduction to social psychology covers conformity, mass communication, propaganda, persuasion, social cognition, self-justification, aggression, prejudice, liking, and loving. This edition won the APA National Media Award.

Atkinson, D., Morten, G., & Sue, D. (1993). *Counseling American minorities* (4th ed.). Dubuque, IA: Brown & Benchmark.
Offers guidance about working with American Indian, Asian American, African American, and Latino clients.

Axline, V. (1964). *Dibs: In search of self.* New York: Ballantine.
A classic, moving tale of a troubled child in therapy.

Balter, M., & Katz, R. (1987). *Nobody's child.* Reading, MA: Addison-Wesley.
Marie Balter spent 25 years in mental hospitals, then attended Harvard University and became a spokesperson for the mentally ill. A dramatic and moving story in the tradition of I Never Promised You a Rose Garden.

Bass, E., & Davis, L. (1994). *The courage to heal: A guide for women survivors of child sexual abuse* (3rd ed.). New York: HarperCollins.

Highly regarded, but controversial, step-by-step self-help book for women who are (or suspect that they are) survivors of childhood sexual abuse. Includes many powerful case studies as well as writing exercises designed to begin the healing process as well as an extensive list of useful resources. (See also the Davis workbook below.)

Bass, E., & Kaufman, K. (1996). *Free your mind: The book for gay, lesbian, and bisexual youth—and their allies*. NY: HarperPerennial.

Answers to many of the questions gay, lesbian, and bisexual youth have, such as how to deal with homophobia in their schools. Also gives advice to allies, teachers, parents, counselors, etc., as to what they can do to help gay, lesbian, and bisexual youth. An excellent guide and resource.

Baur, S. (1988). *Hypochondria: Woeful imaginings*. Berkeley, CA: University of California Press.

A highly readable history of the source, nature, and treatment of hypochondriasis, including case studies of famous hypochondriacs throughout history (e.g., Tolstoy, Darwin, and Boswell). Includes contemporary perspectives as well as recent research.

Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: Penguin.

A highly regarded but challenging book on emotional disorders. The author, one of the pioneers of cognitive therapy, describes how cognitions can affect emotions (particularly depression) and describes procedures for changing cognitions (and thus changing undesirable emotions).

Beck, A. T., & Emery, G. (1985). *Anxiety disorders and phobias: A cognitive perspective*. New York: Basic Books.

A challenging book on anxiety and phobias written from a cognitive perspective. Includes a summary of cognitive therapy as well as suggestions for overcoming problems related to anxiety.

Beck, A. T. (1988). *Love is never enough*. New York: HarperCollins.

Provides a practical application of cognitive therapy principles to troubled marriages and relationships. Includes exercises and advice.

Berzon, B., & Leighton, R. (Eds.). (1979/1984). *Positively gay*. Millbrae, CA: Celestial Arts.

The first, and still one of the best, introductions to a wide variety of issues in lesbian and gay life. Chapters cover such topics as coming out, relationships and couples, parenting, religious issues, aging, political issues, vocational and financial planning, and lesbian/gay communities. Very readable and accessible.

Blumenfeld, W. J. (Ed.). (1992). *Homophobia: How we all pay the price*. Boston, MA: Beacon Press.

Although not psychological in focus, this book is useful in making connections between homophobia and other kinds of oppression. For example, there is a chapter entitled "Racism and Homophobia as Reflections of Their Perpetrators" (P. B. Harper), and other chapters on similar themes.

Brislin, R. (1993). *Understanding culture's influence on behavior*. San Diego, CA: Harcourt Brace Jovanovich.

Introduces cross-cultural psychology as a means of promoting more effective communication among people from different cultural backgrounds.

Burns, D. D. (1980). *Feeling good: The new mood therapy*. New York: Avon.

This best-selling self-help book on coping with depression uses principles of cognitive therapy. Discusses depression in general, distinguishing it from other negative moods, as well as suicide. Includes self-tests and practical advice for coping with depression.

Burns, D. D. (1985). *Intimate connections: The clinically proven program for making close friends and finding a loving partner*. New York: Signet.

A highly regarded self-help book on loneliness. Examines various reasons why some people feel lonely and provides self-tests and other practical techniques for reducing loneliness.

Burns, D. D. (1989). *The feeling good handbook*. New York: Plume.
This sequel to the 1980 book described above goes beyond depression to cover a much wider range of positive and negative moods and everyday problems. Provides step-by-step procedures for monitoring and changing moods.

Caplen, P. J. (1989). *Don't blame mother: Mending the mother–daughter relationship*. New York: Harper & Row.
A well-regarded self-help book on society's myths and stereotypes about mothers and techniques through which daughters can get around mother-blame and reestablish more fulfilling and caring relationships with their mothers.

Caplen, P. J. (1995). *They say you're crazy: How the world's most powerful psychiatrists decide who's normal*. Reading, MA: Addison-Wesley.
Provides a soothing account of the evolution of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders and the politics and personalities involved in determining what is and is not included.

Chase, T. (1989). *When rabbit howls*. New York: Dutton.
Another account of childhood abuse and multiple personalities, or dissociative identity disorder. In this case, each of the 92 personalities contributes to the book.

Chesler, P. (1972, 1989). *Women and madness*. San Diego, CA: Harcourt Brace Jovanovich.
Proposes that sex-role stereotypes influence what is called mental illness and that there is a double standard of mental health. The 1989 paperback includes an evaluation of changes (or lack thereof) in the nearly 20 years since the first edition appeared.

Cialdini, R. B. (1993). *Influence: The psychology of persuasion* (Rev. ed.). New York: Morrow.
A highly readable, engaging, and authoritative account of what psychology tells us about selling and marketing, persuasion, and influence.

Cohen, D. B. (1994). *Out of the blue: Depression and human nature*. New York: Norton.
Explores the full range of depression from occasional "blues" to chronic severe depression, including related phenomena such as mourning and suicide. Summarizes present state of knowledge and illustrates with examples from history, literature, and current events.

Colgrove, M., Bloomfield, H. H., & McWilliams, P. (1991). *How to survive the loss of a love* (2nd ed.). Los Angeles: Prelude.
The "loss of a love" is defined very broadly, so this book addresses losses not only of treasured people and relationships, but also robbery, rape, moving, failure, loss of youth, menopause, lawsuits, and many other losses.

Committee of Lesbian and Gay Concerns. (1990). *A selected bibliography of lesbian and gay concerns in psychology: An affirmative perspective*. Washington, DC: American Psychological Association.
Topics that categorize the references are the following: General reading, lesbian and gay identity, lesbian and gay development, crucial issues in adaptation, psychotherapy and counseling, and Acquired Immune Deficiency Syndrome (AIDS) and HIV disease.

Coren, S. (1993). *The left-hander syndrome: The causes and consequences of left-handedness*. New York: Random House.
The title refers to handedness, but the author also describes other asymmetries (footedness, eyedness) and discusses their sources as well as their links to other things such as intelligence and creativity. Also discusses coping strategies for left-handers caught in the right-handers' world. Clear and entertaining with lots of good anecdotes, the book may overstate the negative effects of being left-handed.

Corsini, R. (Ed.). (1989). *Current psychotherapies*. Itasca, IL: Peacock.
Describes contemporary approaches to psychotherapy, including therapies in non-Western cultures.

Costa, P., & Widiger, T. (1994). *Personality disorder and the five-factor model of personality*. Washington, DC: American Psychological Association.
Explains how the five-factor model of personality can help in diagnosing and treating psychological disorders.

Coven, F. L. (1994). *Crazy all the time: On the psycho ward of Bellevue Hospital*. New York: Fawcett Crest.
An engrossing account of the lives of patients and staff written by the chief psychologist at Bellevue Hospital.

Cronkite, E. (1994). *On the edge of darkness: Conversations about conquering depression*. New York: Dell.
Public figures (including Mike Wallace, Dick Clark, William Styron, and Joan Rivers) describe chronic depression.

Davis, M., Eshelman, E. R., & McKay, M. (1985). *The relaxation and stress reduction workbook* (4th ed.). Oakland, CA: New Harbinger.
Provides a step-by-step program for relaxing and reducing stress and instructions for engaging in various kinds of relaxation techniques.

Diamant, L. (Ed.). (1993). *Homosexual issues in the workplace*. Washington, DC: Taylor and Francis.
Contains chapters on lesbians/gays in a wide variety of professions and occupations, including education, the military, religion, etc. Also has general chapters on discrimination in the workplace and legal issues. An excellent resource for information about particular jobs or occupations.

Donnelly, K. F. (1994). *Recovering from the loss of a child*. New York: Berkeley Publishing Group.
Explores the experience of losing a child through numerous interviews with family members who have lost a child. Provides extensive information about support groups that provide assistance.

Donohue, W. A., & Kolt, R. (1992). *Managing interpersonal conflict*. Newbury Park, CA: Sage.
A practical guide on deciding whether to confront a conflict, planning how to deal with the conflict, and negotiating differences in goals and power. Includes a flowchart for conflict management and provides many interesting real-life examples, self-test questionnaires, and exercises.

Doyle, J. A. (1995). *The male experience*. Madison, WI: Brown & Benchmark.
This engaging, easy-to-read text introduces men's studies and the psychology of men. It is highly suitable for high school students and students in the first 2 years of college.

Edgerton, R. B. (1993). *The cloak of competence* (Rev. ed.). Berkeley, CA: University of California Press.
An updated version of a classic study of the lives of people who had been institutionalized with mental retardation. Discusses their lives, fears, hopes, and the effect of stigma on them and includes information on what has happened to them more than 30 years after the original study.

Ekman, P. (1985, 1992). *Telling lies: Clues to deceit in the marketplace, politics, and marriage*. New York: Norton.
A world-renowned expert on nonverbal cues to emotion discusses lying and lie detection. Includes consideration of Oliver North, Richard Nixon, Lyndon Johnson, and Clarence Thomas/Anita Hill testimony, among other interesting topics.

Ellis, A., & Harper, R. (1975). *A new guide to rational living*. Englewood Cliffs, NJ: Prentice-Hall.
Applies cognitive psychology to understanding how some people are constrained by irrational beliefs and provides many examples and suggestions for ways to change negative irrational beliefs.

Ellis, A., & Knaus, W. J. (1977). *Overcoming procrastination: How to think and act rationally in spite of life's inevitable hassles*. New York: Penguin.
Applies cognitive psychology to overcoming procrastination. Examines the causes of procrastination and describes techniques for overcoming it.

Engler, J., & Goleman, D. (1992). *The consumer's guide to psychotherapy*. New York: Simon & Schuster.
Provides assistance in determining whether therapy is warranted and what kind of therapy may be most helpful.

Fieve, R. R. (1975, 1989). *Moodswing* (Rev. ed.). New York: Bantam Books.
Revised edition of a classic book on the causes, symptoms, and treatments available for mood disorders, including bipolar disorder, seasonal affective disorder, and premenstrual syndrome. This edition focuses increased attention on drug therapies.

Finney, L. D. (1995). *Reach for joy: How to find the right therapist and therapy for you.* Freedom, CA: Crossing Press.
In the words of one reviewer, this is "A Consumer's Report for the mind." Provides guidance (including numerous checklists) for deciding whether you should see a therapist, for finding and evaluating potential therapists, and for assessing progress in therapy.

Fisher, R., Ury, W., & Patton, B. (1991). *Getting to yes: Negotiating agreement without giving in* (2nd ed.). New York: Penguin.
This best-selling, self-help book explains effective negotiating, including step-by-step instructions for resolving conflicts using principled negotiation.

Frankl, V. E. (1959, 1962, 1984). *Man's search for meaning.* New York: Pocket Books.
This classic existential book examines the role of meaning in human lives as well as the philosophy behind logotherapy. Frankl is a psychiatrist, creator of logotherapy, and survivor of Auschwitz.

Friend, R. A. (1991). Older lesbian and gay people: A theory of successful aging. *Journal of Homosexuality, 20*(3-4), 99-118.
Contains statements of the adaptive advantages of lesbian and gay people in regard to stress, coping, and life transitions. This article discusses aspects of the "coming out" processes that are thought to prepare L/G/B people quite well for the challenges of aging.

Fromm, E. (1956). *The art of loving.* New York: Harper & Row.
Provides a brief but challenging discussion of the nature of love, the importance of love, and the challenge of learning to love.

Gay, P. (1989). *The Freud reader.* New York: Norton.
A good companion to the Hamm primer, this book provides an excellent selection from the full range of Freud's writings, with a brief introduction to each piece.

Geisinger, K. (1992). *Psychological testing of Hispanics.* Washington, DC: American Psychological Association.
Examines various issues concerning the psychological testing of Latinos.

Gilligan, C. (1982, 1993). *In a different voice: Psychological theory and women's development.* Cambridge: Harvard University Press.
A best-selling, highly influential and controversial attack on the biases in most traditional theories of human development.

Gilman, S. L. (1985). *Difference and pathology: Stereotypes of sexuality, race, and madness.* Ithaca, New York: Cornell University Press.
A scholarly but readable presentation of the thesis that human beings need to create stereotypes as a means of dealing with anxiety and their ultimate lack of control over the environment. Cites stereotypes of race, sexuality, and pathology as historically the most powerful.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ.* New York: Bantam.
Eloquently argues against IQ as a single measure of intelligence.

Goodchilds, J. D. (Ed.). (1991). *Psychological perspectives on human diversity in America.* Washington, DC: American Psychological Association.
This book argues that race, ethnicity, gender, and sexual orientation are dimensions (not categories) of the human experience. The editor suggests that societal relationships are greatly affected by this lack of knowledge, thus further complicating sensitive issues. Five respected psychologists examine four of the dimensions of human experience: race, ethnicity, gender, and sexual orientation.

Gould, S.J. *The mismeasure of man.* New York: Norton.
Offers a delightful discussion of the evolution of measurement devoted to capturing human individual differences.

Greenberg, J. (1964). *I never promised you a rose garden*. New York: Pengum.
A classic by J. Greenberg about her descent into psychosis when she was 16 years old, her 3 years in mental institutions, and her later recovery.

Greenfield, J. (1972, 1970). *A child called Noah: A family journal*. San Diego, CA: Harvest Book.
A moving, award-winning story of a family's day-to-day living with and loving a brain-damaged child.

Griffen, C. W., Wirth, M. J., & Wirth, A. G. (1986). *Beyond acceptance: Parents of lesbians and gays talk about their experiences*. Englewood Cliffs, NJ: Prentice Hall.
This book is written by and for parents of lesbians and gay men and contains frank discussions of some of the issues parents face when they learn their children are lesbian/gay. Chapters cover topics such as coming to terms with guilt, overcoming restrictive religious ideologies, telling others, and relating to lesbian/gay children affirmatively. Also contains an extensive bibliography and list of helpful organizations. Book can be useful in discussions of coming out and family relationships.

Hallowell, E. M., & Ratey, J. J. (1994). *Driven to distraction: Recognizing and coping with attention deficit disorder from childhood through adulthood*. New York: Simon & Schuster.
A broad-ranging discussion of attention deficit disorder (ADD), including case studies to demonstrate various forms of this disorder in children and adults. Discusses treatments, including an appendix on where to find help.

Hallowell, E. M., & Ratey, J. J. (1994). *Answers to distraction*. New York: Pantheon.
Answers common questions raised about ADD since the publication of Driven to Distraction.

Hendrix, H. (1988). *Getting the love you want: A guide for couples*. New York: HarperCollins.
Gives tips for improving a problematic marriage. Discusses why people choose their partners and describes ways to become aware of the factors that positively or negatively influence marriages. Provides step-by-step exercises for dealing with some of the most common marital problems.

Hillman, J., & Ventura, M. (1992). *We've had a hundred years of psychotherapy and the world's getting worse*. New York: HarperCollins.
Presents a dialogue between a psychoanalyst and a writer who set out to rethink the nature and state of psychotherapy.

Jamison, K. R. (1993). *Touched with fire: Manic-depressive illness and the artistic temperament*. New York: Free Press.
Explores the question whether manic-depressive illness is related to creative occupations.

Jeffers, S. (1987). *Feel the fear and do it anyway*. New York: Fawcett Columbine.
Written from a cognitive psychology perspective, this self-help book is about coping with fearfulness and passivity. Offers practical advice and exercises to overcome fearfulness.

Johnson, A. S. (1990). *Out of Bedlam: The truth about deinstitutionalization*. New York: Basic Books.
A clinical social worker in New York City describes how deinstitutionalization arose, its initial promise, and its often devastating consequences in the absence of adequate community-based care alternatives. An excellent, comprehensive, informative, thoughtful, but highly critical overview by an advocate of deinstitutionalization.

Kagan, J. (1994). *Galen's prophecy: Temperament in human nature*. New York: Basic Books.
A highly readable account by an eminent psychologist about evidence for inborn temperament. Focuses on evidence that some children are born inhibited and others are born uninhibited, and the implications of this for understanding shyness and other aspects of adult personality.

Kalter, N. (1990). *Growing up with divorce: Helping your child avoid immediate and later emotional problems*. New York: Free Press.
This self-help book is for divorced parents. A psychologist provides advice for helping children of different ages to cope with divorce. The book includes case studies.

Kaysen, S. (1993). *Girl, interrupted*. New York: Vintage.

The author was committed to a mental hospital at age 18 for 2 years. Her memoir describes the patients and staff members, but in the process she raises disturbing questions about hospitalization, diagnosis, women, and mental illness. Witty but dark and disturbing, this book continues the tradition of One Flew Over the Cuckoo's Nest.

Kelly, K., & Ramundo, P. (1993). *You mean I'm not lazy, stupid, or crazy? A self-help book for adults with attention deficit disorder*. New York: Scribner.

An entertaining and readable discussion of adult attention deficit disorder, including diagnosis, causes, and management of the disorder. Includes studies and autobiographical material.

Klein, D. F., & Wender, P. H. (1992). *Understanding depression: A complete guide to its diagnosis and treatment*. New York: Oxford University Press.

A practical discussion of biological depression (both normal and pathological) and related disorders, such as panic attacks, seasonal affective disorder, and premenstrual syndrome. Includes self-tests and advice for relief from depression. Emphasis is on medical treatments.

Kohn, A. (1986, 1992). *No contest: The case against competition* (Rev. ed.). Boston: Houghton Mifflin.

Describes the dark side of competition and the notion that "competitiveness" and "winning" are the source of happiness. The revised edition includes an update on reactions to the book since its first publication. Winner of the APA's Award for Excellence in the Media.

Kreisman, J. J., & Straus, H. (1989). *I hate you—don't leave me: Understanding the borderline personality*. New York: Avon.

An interesting discussion of borderline personality disorder; includes case studies, diagnosis, and treatment of this controversial and confusing disorder.

Kushner, H. S. (1981). *When bad things happen to good people*. New York: Avon.

This self-help book on death and dying addresses the vexing question of how God can allow bad things to happen to good people.

Kutash, I. L., & Wolf, A. (Eds.). (1986, 1993). *Psychotherapist's casebook: Theory and technique in the practice of modern therapies*. Northvale, NJ: Jason Aronson.

A readable and engaging account of almost all current therapies, including many excerpts from representative therapy sessions.

Laing, R. D. (1969). *The divided self: An existential study of sanity and madness*. New York: Penguin.

A classic collection of case studies of people with schizophrenia and Laing's existential analysis of their personal alienation and estrangement from themselves and society.

Landman, J. (1993). *Regret: The persistence of the possible*. New York: Oxford University Press.

Presents a broad-ranging, multidisciplinary discussion by a psychologist of what people most regret about their lives and how regret differs from other emotions. Includes thought-provoking excerpts from several literary works, each shedding light on regret.

Lerner, H. G. (1985). *The dance of anger: A women's guide to changing the patterns of intimate relationships*. New York: Harper & Row.

Describes effective and ineffective ways for women to deal with anger in themselves and in others.

LeShan, E. (1976). *Learning to say good-bye: When a child's parent dies*. New York: Avon.

Intended for children who have lost a parent. Written in the form of a letter from the author to the reader, a format that provides a highly personal, supportive, and caring discussion of what happens when a parent dies, how people feel and act, and how to cope with the feelings of grief and the turmoil and confusion.

Levant, R. F., & Pollack, W. S. (Eds.). (1995). *A new psychology of men*. New York: Basic Books.
This 1995 edited volume summarizes much of the recent advances in theory and research about the psychology of men and masculinity. It is suitable for those seeking greater background and depth on the subject.

Levenkron, S. (1991). *Obsessive-compulsive disorders: Treating and understanding crippling habits*. New York: Warner.
Includes many case studies that illustrate the disorders and demonstrate effective ways of coping with them.

Lonner, W., & Malpass, R. (Eds.). (1994). *Psychology and culture*. Boston, MA: Allyn & Bacon.
Includes articles on an impressive array of cross-cultural topics.

Mace, N., & Rabins, P. (1981). *The 36-hour day*. Baltimore, MD: Johns Hopkins University Press.
Offers sensitive advice to families coping with the challenge of Alzheimer's disease.

Mallinger, A. R., & DeWyze, J. (1993). *Too perfect: When being in control gets out of control*. New York: Random House.
Discusses the negative effects of behavior patterns that characterize obsessive perfectionists. Compulsive worriers, neat freaks, and workaholics, among others, are discussed along with suggestions for reducing the obsessive need for control and perfection; many case studies.

Marshall, J. R. (1994). *Social phobia: From shyness to social anxiety*. New York: Basic Books.
Through case histories and self-tests, the author (a psychiatrist who specializes in anxiety disorders) provides interesting insight into the sources, nature, and treatment of social phobias.

Martin, R. (1994). *Out of silence: An autistic boy's journey into language and communication*. New York: Penguin.
A fascinating account of the author's nephew and his family coping with autism.

Matsumoto, D. (1994). *People: Psychology from a cultural perspective*. Pacific Grove, CA: Brooks/Cole.
Focuses on the far-reaching impact of culture on behavior, feeling, and thought.

Maurice, C. (1993). *Let me hear your voice: A family's triumph over autism*. New York: Fawcett Columbine.
An account of Anne Marie, an autistic child, and her response to behavioral therapy.

McNamara, B. (1994). *Breakdown*. New York: Pocket Books.
Presents the lurid but true story of a Harvard Medical School student who committed suicide less than a year after he terminated therapy for depression. After his death, it became apparent that he had been involved in a bizarre form of experimental therapy. This disturbing, widely publicized case raises difficult questions about interdependency in therapy and about professional ethics.

Milgram, S. (1974). *Obedience to authority: An experimental view*. New York: Harper Torchbooks.
A highly readable account of Milgram's classic experiments, including implications of those studies for understanding human behavior. An appendix includes ethical issues raised by the experiments.

Miller, D. (1994). *Women who hurt themselves: A book of hope and understanding*. New York: Basic Books.
A psychologist explores "women at war with themselves," including cases of self-mutilation, cosmetic surgery, and eating disorders, among others.

Moorman, M. (1992). *My sister's keeper: Learning to cope with a sibling's mental illness*. New York: Penguin.
A moving story of two sisters, one with schizophrenia and the other trying to care for her while coping with her own fears for herself, her children, and her family.

Muensterberger, W. (1994). *Collecting: An unruly passion*. Princeton, NJ: Princeton University Press.
A psychoanalyst discusses people (some famous, some not so famous) obsessed with collecting things. Different from most of the books on this list, Collecting presents some heady stuff (that's an inside joke for those who have read the book).

Mueser, K. T., & Gingerich, S. (1994). *Coping with schizophrenia: A guide for families*. Oakland, CA: New Harbinger.
A step-by-step guide to coping with schizophrenia, including several dozen practical worksheets.

Murphy, K. R., & Levert, S. (1995). *Out of the fog: Treatment options and coping strategies for adult attention deficit disorder*. New York: Hyperion.
The chief of an adult ADD Hyperactivity Disorder Clinic provides an excellent, readable, and practical guide to the diagnosis of adult ADD, including diagnostic self-tests, ways to cope with it, and treatment options.

Napier, A. Y., & Whitaker, C. A. (1978). *The family crucible*. New York: Harper & Row.
Takes the position that most family problems arise from relationships within the family rather than from individual family members; includes an in-depth case study of therapy with one family.

Neziroglu, F., & Yaryura-Tobias, J. A. (1995). *Over and over again: Understanding obsessive compulsive disorder* (Rev. ed.). New York: Lexington.
Discusses diagnosis, causes, and treatment of obsessive/compulsive disorders, including many case studies and answers to common questions.

Papolos, D., & Papolos, J. (1992). *Overcoming depression* (Rev. ed.). New York: HarperCollins.
An excellent, widely recommended practical guide to the diagnosis and treatment of depression and manic-depression (bipolar disorder).

Peck, M. S. (1978). *The road less traveled: A new psychology of love, traditional values, and spiritual growth*. New York: Simon & Schuster.
All-time best-selling book discusses the centrality of spirituality in many peoples' lives as well as the importance of confronting adversity, integrity, and self-discipline.

Peele, S., & Brodsky, A. (1991). *The truth about addiction and recovery*. New York: Simon & Schuster.
Provides an alternative to 12-step programs in treating various addictions.

Pharr, S. (1998). *Homophobia: A weapon of sexism*. Inverness, CA: Chardon Press.
This book explores the connections between homophobia and sexism in society. As such, it provides an excellent demonstration of the intersection among multiple forms of oppression. It is very readable and even contains a few illustrations.

Phillips, K. A. (1966). *The broken mirror: Understanding and treating body dysmorphic disorder*. New York: Oxford.
Explores the challenge of people finding some aspect of their body repugnant and ways this problem can be treated.

Pratkanis, A. R., & Aronson, E. (1992). *Age of propaganda: The everyday use and abuse of persuasion*. New York: Freeman.
Sets out to "understand how [persuasion] influences our behavior, how we can protect ourselves from unwanted propaganda, and how we can ultimately come to use persuasion wisely." Many real-life examples.

Rando, T. A. (1988). *How to go on living when someone you love dies*. New York: Bantam.
Author discusses grief, sex differences in grieving, and the causes of grief, and then turns her attention to the process of grieving. Provides numerous practical suggestions for coping with the death of a loved one, each of which is likely to appeal to some people more than others. Also includes extensive information about additional sources of support during bereavement.

Rapoport, J. L. (1989). *The boy who couldn't stop washing*. New York: Penguin.
Contains fascinating and useful case studies of obsessive compulsive disorders, including diagnosis and treatment.

Reynolds, A. L., & Pope, R. L. (1991). The complexities of diversity: Exploring multiple oppressions. *Journal of Counseling and Development, 70*, 174-180.
A brief article that discusses the intersection of sexual orientation (including bisexuality) with race, ethnicity, class, and gender. Makes an important point about the overlapping of different kinds of diversity and the impor-

tance of considering integrated identities. Although written for counselors, the article is easy to understand and widely applicable.

Rich, A. (1980). Compulsory heterosexuality and lesbian existence. *Signs, 5*, 631-660.
A classic in lesbian studies, this essay documents the effects of heterosexism on lesbian lives. Also weaves together sexism and heterosexism, so is a good resource on the complexity of multiple oppressions.

Robertson, R. (1992). *Beginner's guide to Jungian psychology*. York Beach, ME: Nicholas-Hays.
A highly readable and lively account of the basic concepts of Jungian psychology.

Rodin, J. (1992). *Body traps: Breaking the binds that keep you from feeling good about your body*. New York: Morrow.
Examines the American preoccupation with appearance, good looks, and fitness and demonstrates the psychological effects of these preoccupations. Includes self-tests and specific practical advice.

Rogers, C. R. (1961, 1995). *On becoming a person*. New York: Houghton Mifflin.
This classic book explores person-centered psychotherapy.

Ross, C. A. (1994). *The Osiris complex: Case studies in multiple personality disorder*. Toronto: University of Toronto Free Press.
A psychiatrist discusses numerous case studies that suggest a link between trauma and later multiple personality disorder.

Ryan, C., & Futterman, D. (1998). *Lesbian and gay youth: Care & counseling*. NY: Columbia University Press.
This book is a comprehensive guide to the health and mental health needs of lesbian and gay youth. The sidebars and appendices give the reader important information at a glance. A valuable resource.

Savin-Williams, R. C. (1998). *". . . And then I became gay:" Young men's stories*. NY: Routledge.
The personal narratives of gay and bisexual young men are related in this poignant book.

Scarf, M. (1987). *Intimate partners: Patterns in love and marriage*. New York: Ballantine.
Aims to provide understanding and improvement of troubled marriages; includes many interviews and five in-depth case studies of marriages at different stages of development.

Schiller, L. (1994). *The quiet room: A journey out of the torment of madness*. New York: Warner.
The gripping story of descent into schizophrenia starting at the age of 18 and eventual recovery, much in the tradition of I Never Promised You a Rose Garden.

Schreiber, F. R. (1973). *Sybil*. New York: Warner.
This famous book (made into a movie) presents a case of multiple personality disorder involving 16 selves.

Seager, S. B. (1991). *Psychward*. New York: Berkeley.
A psychiatrist describes a year as an intern on a psychiatric ward.

Segall, M., Dasen, P., Berry, J., & Poortinga, Y. (1990). *Human behavior in global psychology*. Elmsford, NY: Pergamon.
Addresses a wide range of issues from the cross-cultural perspective.

Sheehan, S. (1982). *Is there no place on earth for me?* New York: Vintage.
This beautifully written account of "Sylvia Frumkin's" 20-year struggle with schizophrenia won a Pulitzer Prize.

Simonton, D. K. (1994). *Greatness: Who makes history and why?* New York: Guilford.
An eminently readable book covering the "psychology of greatness" throughout history—the personality traits, creativity, leadership, and genius that seem partly to account for genuine greatness.

Smith, M. J. (1975). *When I say no, I feel guilty: How to cope—using the skills of systematic assertive therapy*. New York: Prometheus.
Deals with assertiveness, particularly how to say "No" without feeling guilty; includes specific advice and many examples.

Sternberg, R. (1997). *Successful intelligence*. New York: Simon & Schuster.
Explores the multifaceted nature of intelligence based on Sternberg's triarchic theory.

Sulloway, F. J. (1997). *Born to rebel: Birth order, family dynamics, and creative lives*. New York: Pantheon.
This provocative book explores how birth order influences personality development.

Styron, W. (1990). *Darkness visible: A memoir of madness*. New York: Random House.
Best-selling autobiographical account of the author's severe depression and eventual recovery.

Szasz, T. S. (1974). *The myth of mental illness: Foundations of a theory of personal conduct* (2nd ed.). New York: Harper & Row.
The latest in Szasz's criticisms of psychiatry and what he calls the "therapeutic state," in which people are drugged and confined because they misbehave.

Tannen, D. (1990). *You just don't understand: Women and men in conversation*. New York: Ballantine.
This best-selling book addresses sources of common problems of communication between men and women and provides suggestions for improving communication.

Terr, L. (1990). *Too scared to cry: Psychic trauma in childhood*. New York: Basic Books.
Profoundly moving account of the effect of severe trauma on children; includes numerous studies.

Torrey, E. F. (1988). *Nowhere to go: The tragic odyssey of the homeless mentally ill*. New York: Harper & Row.
A "scathing indictment" of deinstitutionalization and resulting problems for the homeless mentally ill; describes how the problem arose and what should be done about it.

Torrey, E. F. (1995). *Surviving schizophrenia: A manual for families* (3rd ed.). New York: HarperCollins.
This classic reference on the nature, causes, symptoms, and treatment of schizophrenia includes material on living and coping with schizophrenia in the family.

Triandis, H. (1994). *Culture and social behavior*. New York: McGraw-Hill.
A senior authority in the field of cross-cultural differences offers an insightful book about culture's influence.

Trickett, E. J., Watts, R. J., Birman, D. (Eds.). (1994). *Human diversity: Perspective on people on context*. San Francisco Jossey-Bass: .
This book draws upon both differences and similarities across various groups with a recurring theme for understanding a common cause rooted in historical, cultural, and sociopolitical contexts. Leading scholars share their paradigm and conceptual frameworks on various aspects of human diversity.

Weinberg, G. (1990). *The taboo scarf and other tales of therapy*. New York: Ivy.
Presents fascinating accounts of nine patients and their therapist.

Weinberg, G. (1995). *Invisible masters: Compulsions and the fear that drives them*. New York: Plume.
Presents four case studies of obsessions and compulsions, which illustrate the sources, effects, and treatment of these disorders.

Williams, D. (1992). *Nobody nowhere: The extraordinary autobiography of an autistic*. New York: Avon.
This best-selling autobiography provides extraordinary insight into the nature of autism "from the inside out."

Wilson, R. R. (1986). *Don't panic: Taking control of anxiety attacks*. New York: Harper & Row.
This self-help book focuses on panic attacks. Includes information about panic attacks as well as recommendations for coping with them; many case studies.

Winerip, M. (1994). *9 Highland Road: Sane living for the mentally ill*. New York: Vintage.
An intriguing account of a group home for the mentally ill in Glen Cove, NY. Describes life at the home, its residents, and the impact of the home on the surrounding neighborhood.

Zimbardo, P. G. (1977). *Shyness*. Reading, MA: Addison-Wesley.
A self-help book on shyness. Explores various aspects of shyness, drawing material from many sources. Includes a self-test of shyness and specific advice about reducing shyness.

Zimbardo, P. G., & Leippe, M. R. (1991). *The psychology of attitude change and social influence*. New York: McGraw-Hill.
Discusses conformity, cognitive dissonance, influence through communication, resisting influence, subliminal influence, law, and health. Filled with current and historical real-life examples, from religious cults to terrorism to selling cigarettes.

Using Technology in the Teaching of Psychology

Introduction

Implementing the National Standards for High School Psychology will be a challenge. However, technological resources provide teachers support in the form of specific classroom activities and opportunities for sharing successes and frustrations with other teachers. This section briefly discusses the types of resources available and mentions some potential pitfalls. The section ends with short lists of two types of technological resources, psychology-related software, and psychology-related locations on the Internet.

Sources of Software for Teaching High School Psychology

Computers and teaching seem to be inextricably linked. Teachers at all levels have noted the possibilities of enhanced, active learning with the help of computers. One enduring problem, however, is finding appropriate software. Fortunately, most of the major textbook publishers have developed software to accompany their introductory psychology textbooks, and other distributors have marketed relevant software.

Also, many teachers have developed their own software and have offered it to others free or at a nominal charge to cover cost of material and mailing. The journal *Teaching of Psychology* is a good source for software developed for use by teachers in their own classrooms. Also the Internet can be a good source for such software.

Using Pedagogical Software Effectively

Regardless of the source of the software, some important points emerge about effective use of software in the teaching of psychology. Many students are now "computer literate," but others are still intimidated by computers. Students may have experience with computer games and word processing software, but be unfamiliar with pedagogical uses of the computer. The only way students will become comfortable and competent with computers is by using them. Watching someone else (e.g., the teacher) work with a program is not a very effective way to learn a program. Teachers must provide clear directions and explain underlying concepts and procedures. But we must let students work with the software, make mistakes, learn shortcuts, and simply explore. Problems are inevitable, but they can also be educational. As long as the goal of learning about psychology is not lost when students learn about computers, the time is well spent.

In the development of any new teaching activity or strategy, a preliminary preview is critical. The use of pedagogical software is no different. Although programs are generally written for ease of use and are largely free of bugs, what students learn from them is not always clear. Teachers must identify in advance clear learning goals for students' use of the software. Because students can be captivated by the technology and lose sight of the pedagogy, the teacher must prepare the class for activities or simulations presented by the software and debrief the class later. Planning briefings and debriefings requires careful preparation and preview of the software.

Furthermore, much of the software for teaching psychology was designed for college-level courses, so high school teachers will have to extract the information relevant to their own students and courses. Hence, no matter what claims are made for a particular piece of software, instructors who use the software must thoroughly preview it beforehand.

Some programs are clever and entertaining but not psychological. Students may enjoy them, which is desirable, but not really learn anything about psychology. For example, there are programs that create biorhythm charts. As far

as scientific research has ascertained, biorhythm has no more validity than astrology. Although major publishers may avoid marketing such material, some distributors or Internet sources may present it as truly psychological. A more subtle example is computerized personality inventories. Students tend to enjoy filling these out and reading the results, but an inventory that has not been validated is nothing more than a high-tech horoscope. Individual teachers must ensure that the software used in class has valuable psychological content. (As we will see, this same warning applies to information found on the Internet.)

At the other end of the spectrum, software may be effective in demonstrating psychological principles but not be visually appealing or entertaining. Students must learn that some activities have educational value but lack glamour. Just as some textbooks present complex and important material without benefit of highly visual formatting, computers may do the same thing. Students and teachers should not dismiss software simply because it does not look glamorous. A good teacher may design a pedagogically effective classroom activity using a program completely devoid of "glitz."

In the end, effective teaching involves developing an atmosphere that is congenial to learning. Person-to-person interaction is ultimately more important to successful learning than person-to-machine interaction. Given that student interests often match teacher enthusiasm, we should keep in mind that computers serve as a useful adjunct in the classroom but that these machines will not replace the teacher.

Teaching of Psychology and the Internet

One cannot go a day without reading or hearing some news about the Internet. Companies now include their Internet addresses in their commercials. Politicians are setting up their own Web sites. The telephone company is even including e-mail addresses in the phone book. The Internet permeates almost every aspect of our society.

Despite all the publicity the Internet has received in the past few years, many people still have little idea what it is, how it functions, or how it could benefit them. The Internet began in the 1960s as a Defense Department project designed to ensure communications in the event of a nuclear war. The Internet is essentially a means by which computers exchange information via phone lines and more sophisticated means. The information exchanged can be as simple as a written message or as complex as a full computer program or a live television broadcast. Once a computer is connected to the Internet, we can exchange information between that computer and almost any other computer on the Internet. The Internet has grown from its Defense Department beginnings to include computers at universities, colleges, government agencies, businesses, and other organizations, with millions of daily users from all walks of life and from all over the world.

Information on the Internet comes in a wide variety of forms, and there are many tools used to organize, locate, transfer, and otherwise share that information. These tools include e-mail, gophers, World Wide Web sites, search engines, newsgroups, listservs, on-line journals, and many more. With its size and magnitude, the Internet can occasionally overwhelm and confuse even the most advanced computer user. However, with patience and time, anyone can learn to use the Internet.

Why Get Connected to the Internet?

The versatile Internet can be a valuable tool for teaching high school psychology. Among the most important uses are to communicate with other psychology teachers, do research, and obtain psychology-related computer software.

Communicating with other psychology teachers is probably the most common and beneficial use of the Internet. In many cases, a psychology teacher at the secondary level is alone because no one else in the building teaches psychology. In the past, communicating with other psychology teachers meant sending letters, attending workshops, and joining professional organizations. Getting connected to the Internet can now be added to that list. With the Internet, you can easily communicate with hundreds of other psychology teachers. An Internet connection allows teachers to get knowledgeable responses to questions in time for the next day's class.

Besides providing easy communication among teachers, the Internet also provides access to computers with a wealth of information on almost any topic imaginable. For example, many libraries have their complete card catalogs on-line.

Newspapers, such as the *New York Times, The Washington Post, and Chicago Tribune*, have on-line editions. Complete books can be found. Research now can be done with the click of a button, without ever leaving home or school.

Sharing computer programs on the Internet is almost as easy as sharing written information. Some of the psychology-oriented Internet sites discussed below carry small programs designed by and for introductory psychology teachers. These programs can be transferred to your computer in just a few simple steps.

Getting Connected

Because there are literally thousands of ways to connect to the Internet, with almost daily changes, a step-by-step set of instructions is useless. However, some general information may be helpful. There are two basic types of Internet connections: the direct network connection and the dial-up connection. A direct connection is faster and does not tie up a phone line, but is only an option if one's institution provides appropriate hardware and software. Such a connection involves an institution's connecting a central computer (often called an Internet server) to the Internet and providing direct cabling from that computer to your desktop computer.

A dial-up connection uses standard telephone lines to transfer information between your desktop computer and an Internet server. To use a dial-up connection, one needs a computer, a modem and available phone line, Internet access software, and a service provider. The service provider is an organization that maintains the Internet server and its connection to the Internet as well as a bank of modems for establishing connections between the server and your desktop computer. Most service providers are commercial organizations, ranging from local to national or even worldwide in scope. Before choosing a service provider, talk to several people using the Internet for their opinions on the best source of access in your area. Many service providers offer free trials of their services. Furthermore, teachers who take for-credit university courses may have access to the Internet included in tuition.

Internet Tools

Electronic Mail, Mailing Lists, and the World Wide Web

Electronic mail (e-mail) is one of the most popular and useful aspects of the Internet. E-mail is the electronic version of sending a letter. However, unlike the traditional mail system, messages are delivered almost instantaneously. You can often send a message in the morning and have a response by noon. Almost everyone connected to the Internet can send and receive e-mail.

One difficulty with e-mail is obtaining a person's e-mail address. Many directories on the Internet list people's e-mail addresses, but none is comprehensive. With that difficulty in mind, the PsycList Project was developed in 1994. The PsycList Project is a listing of the e-mail addresses of people interested in the teaching of psychology at the secondary level. The listing is available on the Teaching of Psychology in Secondary Schools (TOPSS) World Wide Web site, as well as via e-mail. To have your e-mail address added to the PsycList Project listing, send the following information:

Your first and last names
Your school's name
Your school's address, with city, state, and zip code
Your school's telephone number, with area code
Your e-mail address

to Kent Korek, the listing coordinator, at (his e-mail address): kkorek@execpc.com

Electronic Mailing Lists (Listservs)

Electronic mailing lists use e-mail on a large scale. Whereas standard e-mail uses the Internet to send messages between two individuals, mailing lists use the Internet to send messages to everyone on a list of e-mail addresses. To use a mailing list, one must first subscribe to the mailing list. This involves using standard e-mail to send a short subscription message directly to a server computer. That computer takes your e-mail address from the message and adds it to the list of addresses of persons who will receive mail sent to the list.

Once you have subscribed to a mailing list, you can send a message to everyone on the list by simply sending it

to a single list address. Electronic mailing lists allow groups of people to carry on dialog (called "threads") and share ideas. For example, Psych-News is an electronic mailing list devoted to the teaching of high school psychology. Psych-News includes hundreds of teachers. One member of Psych-News may send an e-mail message with a question, idea, comment, or problem to the list address. That message is then sent to everyone on the Psych-News list. Anyone reading the message can then respond either privately to the original member (by responding to that member's e-mail address) or publicly to the entire list (by responding to the list address).

Two lists are of particular interest to psychology teachers. Psych-News, mentioned earlier, is designed for people interested in the teaching of psychology at the high school level. Most of the list members are high school psychology teachers, although many college and university teachers are members as well. To join Psych-News, send the message:

subscribe Psych-News *your name*

to the address:

listserv@listserv.uh.edu

TIPS, Teaching in the Psychological Sciences, is designed more for teachers at the college and university level. Many high school teachers are members, but the discussions usually center on post-high school education. Please be aware that TIPS can generate a large amount of e-mail. If your service provider limits the size of your mailbox, you may not want to subscribe to TIPS. To join TIPS, send the message:

subscribe TIPS *your name*

to the address:

listserv@tre.tsu.umd.edu

When you subscribe to an electronic mailing list, you will be sent a confirmation message that also gives you information on how to use the list (for example, where to send messages, how to un-subscribe, the name of the list's administrator). Be sure to read that message and to save it for future reference. Psychology teachers tend to be fairly patient with people who are just learning to use the Internet, but when you make a mistake with a mailing list, your mistake may be sent to hundreds of people.

Electronic mailing lists are probably the best way to use the Internet to get answers to your questions about the teaching of psychology. When you send a question to the list, you have access to the expertise of all of the list's subscribers. Furthermore, any of the other subscribers who share your question benefit from the responses.

The World Wide Web

The World Wide Web (WWW, or the Web) is one of the latest and most exciting developments on the Internet. Information on the Web is organized into millions of "Web pages," each of which may include text, graphics, sounds, and even short movies. Web pages are connected to each other using a programming feature called "hyperlinks," which allows the reader of a page to click on a word or graphic on the page to move to another section of that page or to connect to a completely different Web page.

Before the Web, the Internet was organized by location. If you wanted to find information on a certain topic, you had to know the addresses of the computers that carried information on that topic (think of a library in which the books were arranged on the shelves according to publishing company!). The Web makes it far easier to find information on a topic by organizing the information according to subject matter. A Web page may provide hyperlinks to any number of other pages covering the same topic, even if each of those pages is stored on a different computer located in a different country. To access one of those other pages, the user simply clicks on the appropriate hyperlink, and the Internet automatically sends the user to the appropriate computer.

For example, someone could establish a Web page dealing with mental retardation. The page could contain a

brief text description of mental retardation and its causes, as well as pictures of important researchers. In addition to the text and pictures, a hypertext link could be included for the Mental Retardation Association's Web page. Users interested in viewing that Web site would simply click on that link and be transferred to that page, which may also have hyperlinks to other resources on mental retardation.

Since 1995, Teachers of Psychology in Secondary Schools (TOPSS) has maintained a Web site written by and for high school psychology teachers. The site contains

- Information on TOPSS, including how to join
- Items to assist teachers of psychology in their classroom planning
- Items for professional growth and development
- A listing of the e-mail addresses of psychology teachers on the Internet
- Hypertext links to Web sites of interest to psychology teachers

The address for the TOPSS Web site is included in the list of sites at the end of this section.

Using the Internet and the World Wide Web Effectively

The Internet is a wonderful source of information, but using the Internet effectively requires some care. Because there is so much information on the net, it can sometimes be difficult to find what you are looking for. The World Wide Web provides a number of "search engines"—programs that can help point you to the information you want—but it is not uncommon for a search engine to report that there are tens of thousands of sites that meet the criteria you gave for your search. When you find a site of interest, be sure to record the name of the site, or you may never find it again. Most programs for browsing the World Wide Web provide a "bookmark" function that allows you to electronically record the names of sites you expect to use often.

If you assign students to look for information on the Internet, you must provide very clear guidance on how to maximize the results of the search for relevant information. As with educational software, the teacher should carefully preview the assignment to uncover any unusual problems the students are likely to encounter.

Remember, too, that material on the Internet may not have been peer evaluated, so its validity is not guaranteed. Anyone can create a home page and put anything on it; the material may not be even remotely accurate, although professional sources are more likely to know what they are talking about. Students will need guidance on weeding out the less accurate sources.

Conclusion

The information presented in this section should help you get started exploring the technological resources for teaching psychology. Remember that these resources are changing on an almost daily basis, so it is worth revisiting them periodically to see what is new. If you cannot find anything that meets your specific needs, the Internet mailing lists are a perfect forum for requesting help. You are probably not the only one who will benefit from the response you get. If you do find a resource that meets your needs, let others know about it. Whatever technological resources are eventually developed, your greatest resource is your colleagues.

Sites on the Internet for Psychology Teachers

Teachers of Psychology in Secondary Schools (TOPSS)
http://psych.clarion.edu/mm/topss/topss.htm

American Psychological Association
PsychNET (SM)
http://www.apa.org

American Psychological Society (APS)
http://psych.hanover.edu/aps

AskERIC Home Page
http://www.ericir.syr.edu

Educational Testing Service
gopher://gopher.ets.org

The GROHOL Mental Health Page
http://www.coil.com/~grohol

Hanover College Psychology Department
http://psych.hanover.edu/#contents

National Institute of Mental Health (NIMH)
Gopher
gopher://gopher.nimh.hih.gov

Office of Teaching Resources in Psychology
http://www.lemoyne.edu/otrp

PBS Online
http://www.pbs.org

The Psychology Place
http://www.psychplace.com

PsychWeb (by Russ Dewey)
http://www.psych-web.com

Society for the Teaching of Psychology
http://spsp.clarion.edu/Division2/d2.html

Stanford Psychology
http://www.matia.stanford.edu

UCSD Psychology
http://psy.ucsd.edu

Psychology Related Software Available from Publishers

Psychscience
Allyn & Bacon
Sales Support
(800) 852-8024

Psych Lab II and
Simulations and Demonstrations for Introductory Psychology
Brooks/Cole Publishing Company & Wadsworth
Publishing Company
10 Davis Drive
Belmont, CA 94002
(415) 592-2350

Psychology: The Active Learner
Brown & Benchmark
25 Kessel Court
Madison, WI 53711
(800) 527-8198

Psychabilities
Houghton Mifflin
1900 S. Batavia Avenue
Geneva, IL 60134

Discovering Psychology and
Form and Pattern Perception and
Perception on Computer and
Structure of the Ear
Life Science Associates
One Fenimore Road
Bayport, NY 11705
(516) 472-2111

Mindscope
West Publishing Company
620 Opperman Drive
P.O. Box 64779
St. Paul, MN 55164-0779

Psychsim
Worth Publishers
33 Irving Place
New York, NY 10003
(212) 475-6000

Yahoo-Science: Psychology
http://www.yahoo.com/science/psychology

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